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International
Marketing Information
Series



COMMERCIAL NEWS For the Foreign Service

October / November 1976

CNFS



U.S. DEPARTMENT OF COMMERCE
Domestic & International Business Administration
Bureau of International Commerce

Telephone Directory of Country Marketing Managers

Commercial and economic information on most trading partners of the United States is available from the Bureau of International Commerce, U.S. Department of Commerce.

The Bureau is organized geographically with a Country Marketing Manager responsible for a country or group of countries as listed below. Assistance or information about marketing in these countries may be obtained by dialing these key people directly: **202-377** plus the given extension.

Africa (sub-Sahara) 4927

Europe

France and Benelux Countries	4504
Germany and Austria	5228
Italy, Greece and Turkey	3944
Nordic Countries	3848
Spain, Portugal, Switzerland and Yugoslavia	2795
United Kingdom and Canada	4421

Far East

Australia and New Zealand	3646
East Asia and the Pacific	5401
Japan	2425
South Asia	2522
Latin America	
Brazil, Argentina, Paraguay and Uruguay	5427
Mexico, Central America and Panama	2314
Remainder of South America and Caribbean Countries	2995

Special units within the Department of Commerce have been created to deal with particular marketing situations:

Commerce Action Group for the Near East

North Africa 5737

Near East

Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Peoples Democratic Republic of Yemen, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen Arab Republic	5767
Iran, Israel, Egypt	3752

Bureau of East West Trade

Eastern Europe	2645
USSR	4655
People's Republic of China	3583





FOREWORD

The purpose of the *COMMERCIAL NEWS FOR THE FOREIGN SERVICE (CNFS)* is to inform Commercial/Economic Officers of current program and policy developments in the U. S. Department of Commerce and to provide pertinent commercial information for reprinting in the Posts' Commercial Newsletters which are disseminated to the local foreign business community.

This bimonthly publication is designed for and restricted to American Embassies and Consulates overseas and Commerce District Offices in the United States. It is not regularly available on a subscription or gratis basis to American or foreign businessmen. However, it can be reviewed in most overseas Embassy and Consulate libraries as well as in the various Commerce District Offices in the United States.

This information was compiled in cooperation with various government and industry officials. Every effort has been made to ensure that the data contained in this publication is correct. However, no responsibility can be assumed by the U. S. Government for the accuracy of dates or the outcome of any transaction with any person or firm mentioned herein.

Suggestions or comments from the field regarding this publication are welcomed. *Write:* Constance L. White, Editor, Commercial News for the Foreign Service, Office of International Marketing, Bureau of International Commerce, U. S. Department of Commerce, Washington, D. C. 20230; Telephone (AC) 202-377-5784.

21 5 11/13/70

TABLE OF CONTENTS

Number 22

FEATURES

<i>Commerce Department Sees No Need for Tighter Controls Over Foreign Investments in U.S.</i>	1
---	---

COMMERCIAL NEWSBRIEFS	4
-----------------------	---

EXHIBITION SCHEDULES

<i>U.S. Government Sponsored Events Overseas</i>	8
--	---

<i>U.S. Trade Center Locations Overseas</i>	11
---	----

<i>Special Activities</i>	12
---------------------------	----

<i>Major Product Exhibitions in the U.S.</i>	
--	--

<i>Foreign Buyer Program</i>	13
------------------------------	----

CURRENT DEVELOPMENTS IN U.S. TECHNOLOGY	14
---	----

TRADE AND TECHNICAL LITERATURE	17
--------------------------------	----

LICENSING AND INVESTMENT PROPOSALS	20
------------------------------------	----

NEW PRODUCTS U.S.A.	23
---------------------	----

PEOPLE	62
--------	----

INDEX - " <i>New Products U.S.A.</i> "	65
--	----

U.S. DEPARTMENT OF COMMERCE - <i>Directory</i>	
--	--

FEATURES

Commerce Department Sees No Need For Tighter Controls Over Foreign Investments in U.S.

The U.S. Department of Commerce sees no need for tighter controls on foreign investment in the United States and affirms this country's open door, nondiscriminatory policy towards such investments, according to a report issued by Commerce Secretary Elliot L. Richardson. However, the report urges Congress to provide additional authority to monitor foreign investments here in the future.

The Department has endorsed a Senate-passed bill authorizing it to conduct periodic surveys on both foreign investments here and U.S. investments abroad. Its Office of Foreign Investment in the U.S.--established last year--has become the central point for the receipt and analysis of information on inward foreign investment collected by U.S. Government agencies.

The Department's views are contained in a nine-volume report to the Congress, entitled "Foreign Direct Investment in the United States." The report, called for by the Foreign Investment Study Act of 1974, is the product of a year and a half of intensive research by the Department of Commerce. It is the first comprehensive study of this subject.

The study deals extensively with the questions of why, where, and how foreign companies invest in the United States. The research relates only to "direct" foreign investment, defined as ownership of 10 percent or more of voting shares or the equivalent in U.S. firms.

Foreign-owned companies were found to have only a minor position in all major sectors of the American economy. In the foreign-trade area, however, U.S. affiliates of foreign parents accounted for 24 percent of total U.S. export and 30 percent of imports.

The net effects of foreign investment on the U.S. economy are considered by the report to be beneficial. In all, such investment totaled some \$26.5 billion at the end of 1974. The United Kingdom, Canada, and the Netherlands each accounted for about one-fifth of the total. Direct investments from the Middle-East countries were found to be small.

Japanese investment in the U.S. amounted to only about 1 percent of the total. However, as the report states, this figure underestimates the economic significance of Japanese investment.

U.S. affiliates of Japanese parents accounted for 22 percent of total foreign affiliate assets, 42 percent of their exports, 35 percent of their imports and 27 percent of their total sales. All these proportions are the largest for any single country.

Citing the difficulties of providing comprehensive and accurate data on land ownership, the study indicates that 4.9 million acres of land were reported as foreign-owned as of the end of 1974, of which 1 million acres were in the agricultural sector -- about 0.1 percent of the 1.1 billion acres of U.S. farmland.

Western Europe (especially the United Kingdom) and Canada accounted for most of the foreign land ownership. Some Middle East investors are known to have made land purchases through companies incorporated in Europe.

A central element of the report is the 1974 "benchmark statistical" survey conducted by the Commerce Department's Bureau of Economic Analysis. The survey provides information on ownership, assets, sales, earnings, employment, and a variety of other data. The last such survey was made in 1959.

In addition to the benchmark survey, the report includes a number of qualitative studies. These studies relate to: foreign investment and its geographical and industrial concentration, financing, accounting, management and labor practices, applicable U.S. law -- compared with policies and laws of other industrialized countries -- on inward investments, technology transfer, taxation and economic effects of foreign investment.

Foreign investors were found to be motivated primarily by market considerations. The accelerated rate of investment here is accounted for by comparatively favorable investment conditions in the United States, increasing strength of foreign firms, the gradual equalization of U.S. labor costs with those abroad and dollar devaluations. The management and labor practices of foreign owned companies are apparently similar to traditional U.S. practices, and increased employment generally resulted from the investments.

The report concludes that no change in the current U.S. open-door, nondiscriminatory policy toward foreign investment is necessary or desirable. The conclusion is based on findings that:

- foreign direct investments in the United States, while significant in size and scope in some industry lines, are a relatively small factor in the nation's economy;

- massive foreign takeovers of U.S. industry have not occurred and are not anticipated;

- on balance, foreign investments here have essentially the same economic effects as investments by U.S. - owned firms;

- a shift in policy toward increased restraint could have detrimental effects on the U.S. economy and on U.S. relationships with other countries;

- and existing U.S. laws provide adequate protection of national interests so that no change in the current U.S. open-door, nondiscriminatory policy toward foreign investment is necessary or desirable.

Volumes 1 and 2 are sold as a set. They may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The price is \$6.00 a set. Volumes 3-9 of the report may be purchased for \$30.25 from the Government Printing Office.

* * * *

COMMERCIAL NEWSBRIEFS

Who are the Foreign Investors Now Operating Plants in the U.S. -- A comprehensive listing of more than 2,500 such firms, headquartered in 39 foreign nations, has been compiled by Thomas J. Pierpoint of Commerce Department's Bureau of International Commerce. The 58-page compilation, entitled "Foreign Direct Investors in the United States," is available upon written request to Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230.

* *

Exports of Phosphatic Fertilizers Post Gain in First Quarter 1976 -- Exports of phosphatic fertilizers for the first quarter of 1976 rose to 506,000 content tons compared with 459,000 content tons in the same quarter of last year. The quarter's rise reflects exports of 187,000 content tons in March 1976 versus 124,511 tons in March 1975.

Exports of nitrogenous fertilizers at 298,543 content tons in the quarter were about 30 percent below January-March 1975 exports.

* *

Export Council Forms Advisory Subcommittee on Export Administration -- The President's Export Council has created a Subcommittee on Export Administration to advise the Government on matters relating to export licensing and control.

In a letter to Secretary of Commerce Elliot L. Richardson, Council Chairman Fletcher L. Byrom, Chairman of the Board of the Loppers Co., Pittsburgh, said: "The objective of the Subcommittee will be to advise on ways to enable the Government to deal realistically and effectively with the problems of the business community regarding export licensing as affected by national security and foreign policy considerations." In-depth consultation on existing Commerce Department export control activities will be an integral component of the Subcommittee's effort.

The President's Export Council (PEC), a group of 22 chief executive officers of major U.S. firms, was created in 1973 to advise the President on export expansion activities. The Council's recommendations are presented to the President through the Secretary of Commerce. Its subcommittees are created with the Secretary's concurrence, and the Secretary selects subcommittee members.

* *

Richardson Announces Hearings on Relation of Exports and Jobs -- Secretary of Commerce Elliot L. Richardson has announced a series of three public hearings to assess the impact of U.S. exports on American jobs. Manufacturers, trade groups, labor organizations, state and local government officials, consumer groups, bankers and business educators are being invited to testify. "During the past year, considerable public attention has been focused on the effect of exports on domestic employment," Secretary Richardson said.

"Based on available data, it is estimated that our export-related industries in the manufacturing and agricultural sectors support about 3.5 million jobs, and that an additional 3 million to 3.5 million jobs are indirectly linked to exports. "Despite these favorable indications, a number of labor organizations have questioned the effects of exports on employment, suggesting, for example, that exports of capital goods technology and raw materials may increase the productive strength of foreign countries and enable them to compete more effectively against U.S. firms.

"Export statistics by themselves do not tell the whole story," Secretary Richardson said. "In view of the inadequate data on export-related employment, and the conflicting interpretations of this data, we hope these public hearings will provide specific information about the impact of exports on jobs at the local and regional levels, for individual firms and for industries. "We hope they will open a new channel of communication among labor, industry and government, as well as provide a much more detailed picture on the role and benefits of exports in relation to employment."

* *

Californians Receive Largest Number of Patents Granted -- California leads the nation again in the number of patents granted to its inventors, according to statistics for 1975 released by Commerce's Commissioner of Patents and Trademarks. A total of 76,426 patents were issued by the Patent and Trademark Office. Of those, U.S. inventors received a total of 50,155 during the year, which is the equivalent of one per 4,216 in the total population. Californians received 6,780, one to every 3,082 persons. New York ranked second with 4,909 -- one to every 3,686 persons. Residents of foreign countries received 26,271 patents. Japan led with 6,574; the Federal Republic of Germany was second with 6,171; United Kingdom, third with 3,158; France, fourth with 2,436; Switzerland, fifth with 1,473 and Canada, sixth with 1,409.

* *

Commerce Reports on Aid Outlook for U.S. Industries --

Honey Industry -- The Department of Commerce has reported to the President that commercial beekeepers may become eligible to apply for trade adjustment assistance. It follows a determination by the U.S. International Trade Commission that honey is being imported into the United States in such increased quantities as to be a substantial cause of a threat of serious injury to the domestic honey industry. It said that annual shipments of imported honey have increased from 8.9 million pounds in 1970 to 46.4 million in 1975. The leading foreign suppliers in 1975 were Argentina, Australia, Brazil, Canada and Mexico.

Stainless Steel Wire Industry -- Some firms producing round stainless steel wire may become eligible to apply for trade adjustment assistance. The report is the result of a study conducted under provisions of the Trade Act of 1974. It follows a petition to the U.S. International Trade Commission by the Stainless Steel Wire Industry Committee in behalf of wire manufacturers. Stainless steel wire is used in a wide range of products such as nails and other fasteners, springs, rope and welding wire.

Eyeglass Frames -- A manufacturer of eyeglass frames has become eligible to apply for Federal assistance because of damage from foreign imports. The firm was certified eligible to apply to the Commerce Department's Economic Development Administration for assistance under the Trade Act of 1974. Certification authorizes the firm to apply for technical and financial assistance consistent with an adjustment plan and other criteria of the Trade Act. The goal of the adjustment plan is to help businesses regain their competitive position in the market place.

Commerce Prepared to Aid Shrimpers Under Trade Act -- The Commerce Department is prepared to provide trade adjustment assistance to U.S. firms engaged in catching and landing shrimp. This action follows a determination by the U.S. International Trade Commission that the U.S. shrimp-fishing industry is suffering from increased imports. Import relief, in the form of adjustment assistance for firms engaged in catching and landing shrimp was recommended by the commission. Shrimpers seeking to participate in the trade adjustment assistance program will first petition for certification of eligibility.

Fire Standard for Clothing May Affect Fabric and Fashion Design Choices for Future Clothes -- Garment flammability standards curtailing the loose, flowing clothing designs common today could help reduce the number and severity of burn injuries in the 1980's. Commerce's National Bureau of Standards reports that an NBS-developed proposal, based on several years of fact-gathering and testing, sets criteria for fabrics and designs which minimize the fire hazard of all types of clothing. The proposed standard is now being considered by the Consumer Product Safety Commission, the Federal agency responsible for setting mandatory safety requirements for consumer products.

* *

University Scientist Analyzes Ocean's Role in Heat Transport -- Ocean currents carry more than water; they are in effect a mass transit system for heat. Two scientists recently completed the most thorough investigation ever done on how heat energy from the sun is distributed around the earth, and found that the oceans transport much more of this heat than anyone had thought. The data included satellite measurements of reflected sunlight and infrared (heat) radiation from earth for 1964 to 1971; five years of daily atmospheric temperature measurements taken by balloon at about 600 stations throughout the northern hemisphere; and all the ocean temperature observations on record at NOAA's National Oceanographic Data Center.

* *

Advisory Committee on Product Liability Formed -- Secretary of Commerce Elliot L. Richardson has announced the formation of an Advisory Committee on Product Liability to provide the Department of Commerce with ideas and guidance in coping with this major and growing problem facing business and industry. The 18 members of the committee represent manufacturers, wholesalers, retailers, the insurance industry, insurance regulators, the legal profession, labor, and consumers. Secretary Richardson said the committee will advise Under Secretary of Commerce Edward O. Vetter on public policy measures that can be taken to deal with the problems caused by an increasing volume of product liability claims that has resulted in sharply increased insurance premiums. Under Secretary Vetter has scheduled the first meeting of the Advisory Committee for September. Vetter is also Chairman of an Interagency Task Force on Product Liability and he said that the two groups would be working closely together.

* * * *

U.S. GOVERNMENT SPONSORED EVENTS OVERSEAS

November 1976 - February 1977

For further details on many of the events listed below, please refer to the October 11, 1976 issue of Commerce America. The listing below includes *Commercial Exhibitions* and *Trade Center shows*. Also, for your convenience, appropriate Trade Center addresses are included on page 11. Listed events/dates are subject to change or cancellation without prior notice.

<u>DATE</u>	<u>LOCATION</u>	<u>EVENT</u>
<u>November</u>		
8-12	STOCKHOLM Trade Center	Security and Safety Equipment
8-12	SYDNEY Trade Center	EDP Equipment and Systems
15-19	TOKYO Trade Center	Lasers and Electro-Optics
15-19	TAIWAN Trade Center	Communications Equipment
23-27	MILAN Trade Center	Engr. Design Systems and Components
24-30	IRAN, Tehran	SAHO (Air Condition- ing and Refrigeration Equipment)
25-12/1	GERMANY, Munich	Electronica (EIPT and Electronic Components)
29-12/2	PARIS Trade Center	Telecommunications Equipment (JEEP - Multifirm BSP)
29-12/3	LONDON Trade Center	Laboratory Instru- ments for Science and Industry

<u>DATE</u> <u>December</u>	<u>LOCATION</u>	<u>EVENT</u>
6-10	STOCKHOLM Trade Center	Pollution Control Equipment
6-10	MOSCOW Trade Center	Rolling Mill Equipment
7-10	SINGAPORE Trade Center	Process Control Instruments and Equipment
7-10	UNITED KINGDOM, Birmingham	Off-Shore (Oilwell Equipment)
13-17	TAIWAN Trade Center	Business Equipment (JEEP-Multifirm BSP)
<u>January 1977</u>		
10-13	PARIS Trade Center	Pet Products (JEEP - Multifirm BSP)
10-14	LONDON Trade Center	Data Communications Equipment and Systems
19-21	PARIS Trade Center	HYPER '77 (Microwave Eq.) (JEEP-Multifirm BSP)
25-28	MEXICO CITY Trade Center	Automotive Maintenance and Test Equipment
31-2/3	PARIS Trade Center	Business Equipment and Systems
<u>February</u>		
4-7	MILAN Trade Center	Hi-Fi Equipment (Locally-Procured)
6-10	TEHRAN Trade Center	Communications Equipment
7-11	SINGAPORE Trade Center	Energy Systems
7-11	TAIWAN Trade Center	Dockside and Shipbuilding Eqpt. (Offsite: Kaosiung)
8-11	LONDON Trade Center	Business Equipment and Systems

<u>DATE</u>	<u>LOCATION</u>	<u>EVENT</u>
<u>February</u>		
12-14	FRANKFURT/COLOGNE Trade Center	International Housewares Fair (Offsite: Cologne)
14-18	TOKYO Trade Center	Printing and Graphic Arts Equipment
16-20	MEXICO CITY Trade Center	Agricultural Equipment (Offsite: Guadalajara)

* * * *

Singapore Center Moves to More Spacious Quarters --

As of September 1, 1976, the United States Trade Center in Singapore has a new location. The Trade Center, directed by George Clausen, is now located in the Malayan Credit House, 96 Somerset Road. The exhibit area of the new enlarged Center is 2500 sq ft. The conference room of 800 sq ft can accommodate some 60 attendees. The opening event of the new facility was an exhibition entitled "Computers for Business and Industry." Seventeen participants representing 21 American manufacturers displayed their products to some 250 registered visitors. The exhibition presented technical papers, the State of the computer industry, and included a seminar attended by over 900 people. Projected sales for the event totaled more than \$4,200,000 with floor sales of almost \$600,000. Some 25 agent - distributor agreements resulted from the highly successful market promotion.

This new larger facility represents the Department of Commerce's response to the increased competitiveness of U.S. goods and services in the South Asia region.

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(Please refer to the following page for Trade Center addresses.)

* * * *

U. S. TRADE CENTER LOCATIONS OVERSEAS

FRANKFURT

Bockenheimer Landstrasse 24
D6000 Frankfurt/Main, Germany
Telex: 416535 USTCD

SINGAPORE

Malayan Credit House
Ground Floor
96 Somerset Road
Singapore 9, Singapore

LONDON

4/5 Langham Place
London, W.1 U.K.
Telex: 24196

STOCKHOLM

Vasagatan 11, S-101 28
Stockholm, Sweden
Telex: 17306 TRACENT

MEXICO CITY

Apartado Postal
M-2805
Mexico City 1, D.F. Mexico
Telex: 01773091

SYDNEY

37 Pitt Street
Sydney N.S.W. 2000
Australia
Telex: 20158

MILAN

Via Gattamelata, 5
20149 Milan, Italy
Telex: 36208 USTCMIL

TAIPEI

Taiwan Glass Company Bldg.
261 Nanking East Road
Section 3
Taipei, Taiwan

MOSCOW

U.S. Commercial Office
15 Chaykovskovo
Moscow, U.S.S.R.
Telex: 7805

TEHRAN

61 Elizabeth II Boulevard
P.O. Box 50
Tehran, Iran
Telex: IR-213047

OSAKA

American Merchandise
Display Center
Sankei Kaikan Building
27, Umeda-Cho, Kita-Ku
Osaka, Japan

TOKYO

Tameike-Tokyu Building
1-14 Akasaka
1-CHOME
Minato-Ku
Tokyo 107 Japan
Telex: 2424895 USTCJ

PARIS

123 Avenue Charles de Gaulle
92200 Neuilly
Paris, France
Telex: 61-731 USTCNLLSN

WARSAW

U.S. Trade Development
Center
Ulica Wiejska, 20
Warsaw, Poland
Telex: 813934 USTDOPL

SEOUL

82 Sejong
Seoul, Korea

U. S. GOVERNMENT-SPONSORED EVENTS OVERSEAS

Special Activities

The following listing includes *Trade Missions (TM)*, *Technical Sales Seminars (TSS)*, *In-Store Promotions (ISP)*, and *Catalog Exhibitions (CE)*. Listed events/dates are subject to change or cancellation without prior notice.

<u>DATE</u>	<u>LOCATION</u>	<u>EVENT</u>
<u>November</u>		
1-19	GABON/NIGERIA/SUDAN (TSS)	Integrated Agri- business
2-9	YUGOSLAVIA (TSS)	Energy Systems
29-12/8	REPUBLIC OF SOUTH AFRICA (CE)	Metalworking Equipment
<u>December</u>		
4-12	EUROPE, Belgium (CE)	Do-It-Yourself Tools
6-10	DOMINICAN REPUBLIC/ TOBAGO/TRINIDAD (CE)	Health Care Industries
<u>January 1977</u>		
13-25	MALAGASY/ZAIRE/C.A.R. (CE)	Timber Industries and Woodworking Eq.
17-26	MALAYSIA/PHILIPPINES/ THAILAND (CE)	Building Supplies and Equipment
24-30	NETHERLANDS (CE)	Do-It-Yourself Tools
<u>February</u>		
1-18	ITALY/YUGOSLAVIA/GREECE (TSS)	Avionics/Ground Support Equipment
14-25	TUNISIA/MOROCCO/LIBYA (CE)	Agricultural Machinery Equipment
15-3/3	KUWAIT/SAUDI ARABIA/ BAHRAIN (TSS)	Data Processing Equipment

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MAJOR PRODUCT EXHIBITIONS IN THE U.S.

FOREIGN BUYER PROGRAM U.S. Trade Shows January - August 1977

<u>DATE</u>	<u>LOCATION</u>	<u>EVENT</u>
<u>January 1977</u>		
15-18	ANAHEIM, California	National Audio-Visual Convention and Exhibit
<u>February</u>		
14-17	CHICAGO, Illinois	International Air-Conditioning/Heating/Refrigeration Exposition
<u>March</u>		
30-4/1	ANAHEIM, California	International Trucking Show
<u>May</u>		
1-6	ATLANTIC CITY, New Jersey	Knitting Arts Exhibition
21-25	CHICAGO, Illinois	NRA Restaurant, Hotel-Motel Show (58th Annual)
23-25	LAS VEGAS, Nevada	Apartment Builder/Developer Conference and Exposition
<u>June</u>		
13-16	DALLAS, Texas	National Computer Conferences
<u>July</u>		
11-15	CHICAGO, Illinois	National Housewares Exposition
<u>August</u>		
22-25	CHICAGO, Illinois	National Hardware Show

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U.S. EXPOSITION

November 8-12 - Kansas City, Missouri, "American Royal" -- is an international exposition for all producers of livestock and horses. The Midwest area is famous for its production of some of the finest breeding animals in the U.S. Contact: Laurence Pressly, American Royal Livestock Show, American Royal Exposition Building, Kansas City, Missouri 64102 U.S.A.

* * * *

CURRENT DEVELOPMENTS IN U.S. TECHNOLOGY

Thermal Conversion Vessels -- The Maritime Administration (MarAd) has released a report indicating that by 1986 as much as 40 percent of the nation's ammonia requirements could be manufactured aboard specially-built oceangoing thermal energy conversion (OTEC) vessels. The consumption of natural gas--presently the principal raw material for ammonia manufacturing--would be significantly reduced by the OTEC vessels, which would use air and seawater as raw materials.

The OTEC vessels would produce electricity by piping aboard warm ocean water to evaporate ammonia in a closed system, creating a vapor which would drive turbine electrical generators. The vapor would then be condensed by cold water drawn from depths of 2,500 feet, and the cycle would begin again. The electricity generated by this process would be used to electrolyze water to produce hydrogen and to power an air liquefaction plant to produce nitrogen. The hydrogen and nitrogen would then be compressed together to form ammonia. The ammonia would be stored at -28 degrees Fahrenheit until it could be loaded aboard ammonia tankers.

The Executive Summary is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. Its order number is PB 255639/AS; its price is \$4 per copy. The 400-page Detailed Report will be available from NTIS on or about October 1, 1976.

* *

Non-Lighting Tube Saves Energy -- A "Phantom" is solving the case of the conserved kilowatts in some of California's halls of higher education. This Phantom is a non-lighting tube which replaces one of the normal fluorescent tubes in the standard two-tube fixture. The remaining tube operates at about 70 percent of its normal illumination, producing a net saving of about two-thirds in power used, with an illumination level of about a third of that from a normal two-tube fixture. The Phantom is designed primarily for hallways, corridors, storage rooms and other areas that often are over-illuminated. They actually save more power than would be saved by simply removing one tube because the empty ballasts continue to use electricity. Tests indicate that in addition to lasting indefinitely, the phantom tube also prolongs the life of the standard bulb it is used with. Preliminary tests at Commerce's National Bureau of Standards also were positive.

* *

Scientist Supplies An Answer to Solar Radiation Riddle --
A solar radiation riddle posed by early satellite measurements now has been answered by newer satellites and a scientist with Commerce's National Oceanic and Atmospheric Administration (NOAA). Early data from satellites poised above the earth's atmosphere revealed that the earth did not reflect as much solar radiation back into space as had been believed. But scientists could not explain whether this extra energy was absorbed directly by the atmosphere or at the surface of the earth.

Now, Dr. Kirby J. Hanson of NOAA's Environmental Research Laboratories, has found that most of the excess is absorbed at the earth's surface. Hanson has recently completed a global study of solar radiation. His discovery is useful for establishing global radiation values for mathematical models of weather and climate. Hanson found that a surprising 52 percent of the solar energy striking the planet is absorbed by its ocean and land surface, 19 percent is consumed by the atmosphere, and 29 percent is reflected back into space. Until now, on the basis of scattered, ground-based measurements, it was widely believed that no more than 47 percent of the solar energy reaching the earth was absorbed by its surface, 17 percent was intercepted by the atmosphere, and 36 percent reflected back to space.

The study is the first attempt, based on satellite and surface observations, to calculate how much sunshine reaches the earth's surface on a global scale.

* *

"Sniffer" Goes Airborne to Trace Meteorological Consequences of Polluted Air -- National Oceanic and Atmospheric Administration (NOAA) scientists are flying a quarter-ton of delicate sensors into the pollution plumes of industries, powerplants, and cities, searching for microscopic links between air pollution and regional weather, and the elusive quantities which make air pollution different from city to city.

The airborne "Sniffer" permits the NOAA researchers to measure physical and chemical processes as they occur in the plumes of pollutants. Such measurements, scientists believe, are a key to understanding how pollutants evolve chemically after they enter the atmosphere, how they modify weather (especially precipitation) downwind of their source, and how a pollutant source in one location can diminish air quality in communities scores of miles away.

* *

Laboratories Look At Solar Energy Potential for Industrial Heat Processes -- The potential for industries to use solar energy for process heat requirements is being investigated by Battelle's Columbus Laboratories for the Energy Research and Development Administration's (ERDA's) Division of Solar Energy. Purpose of the 11-month study is to identify and quantify those industrial process heat requirements out of 20 different industries that could be supplied by solar thermal energy. Since no such compilation now exists, the data will provide a sound technological basis for ERDA's R&D planning, in industrial applications of solar energy. The 20 industries to be studied range from aluminum and cement to steel and textiles. Several plant facilities within each industry will be surveyed to identify the quantity, temperature range, sources, and forms of energy each requires in its various processes. From the survey data, concept designs will be prepared of solar systems to supply the requirements. These designs will include techniques for integrating the solar energy system with the present production process.

* *

Hull Monitoring System Installed on Merchant Ship -- The captain of an ocean-going vessel will be, more than ever before, the "master of his ship," thanks to a recently developed automated sensor-minicomputer-information display system. The Hull Monitoring System (HMS) was designed under a Maritime Administration Contract and a prototype is being installed this month on the SS American Aquarius, a Lancer class containership of the United States Lines, for a year-long evaluation at sea.

The HMS main control console at the captain's station receives signals from sensors located throughout the ship. The minicomputer analyzes these data and reports at frequent intervals the ship's draft, trim, stability, hull stress, slamming, cargo lashing, and flooding conditions. The status of each condition is displayed on the console screen as a percentage of its design limit. In addition, the conditions are indicated by colored lights (blue for normal, yellow for caution, and red for warning) and sound alerts. The captain can also ask questions about the ship's conditions by pushing buttons on his keyboard; answers appear on the console screen, along with recommendations. Control of the ship, of course, remains with the captain; the HMS is strictly a decision aid device. The HMS is expected not only to help safeguard the ship and its cargo, but also provide better fuel economy.

* * * *

TRADE AND TECHNICAL LITERATURE

U.S. GOVERNMENT PUBLICATION PURCHASED BY NON U.S. CUSTOMERS

"HELPFUL HINTS WHEN ORDERING PUBLICATIONS"

Numerous complaints have been received from non U.S. customers overseas concerning slowness of delivery or non-delivery of order for U.S. Government publications from the Superintendent of Documents. According to the Government Printing Office (GPO), the main causes for these problems are:

1. Remittance was not submitted with the order;
2. Remittance was in foreign currency which is not acceptable as payment;
3. Check was not drawn in U.S. or Canadian bank;
4. Postage stamps were submitted as payment;
5. Special mailing charge was not submitted in remittance.

The Government Printing Office has indicated that by law all government publications must be paid for in advance of shipment, and on all orders mailed outside the United States the GPO adds 25 percent of the selling price to cover international mailing.

The best method of payment recommended for regular customers is to establish a prepaid deposit account with the Superintendent of Documents, U.S. Government Printing Office. For single, non-repetitive orders, the purchaser should submit an International Postal Money Order payable to the Superintendent of Documents.

Please publish the following information in the post's Commercial Newsletter. If the post does not have a Newsletter, please disseminate this information to the local business community through any appropriate means.

HANDY GUIDE TO ENERGY SAVINGS -- A concise guide to conserving electrical energy through the use of automatic controls can help industrial and commercial firms to reduce their electric bills while still maintaining adequate lighting and building comfort. Published by Tork, Inc., the mini-brochure explains that energy conservation is best accomplished by the automatic programming of lighting and electrical equipment, to eliminate waste kwh consumption. Such programming, it says, is done with "energy savers," time switches and photocontrols. This free pocket-sized guide tells how to select the proper energy saver for the job and details uses and applications for photocontrols and the different types of time switch dials--24-hour, skip-a-day, Astronomic and 7-day calendar. WRITE: Tork, Inc., Dept. CN, Mount Vernon, New York 10550 U.S.A.

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A USER'S MANUAL FOR OPTICAL WAVEGUIDE COMMUNICATIONS -- This Manual explains the technical aspects of optical waveguide systems in a basically non-mathematical way. The emphasis is on the practical use of these systems and on making the transition to them from conventional radio frequency systems. Detailed discussions will be found on optical sources, optical detection, the transmission medium, modulation and multiplexing, and systems considerations and design. In addition, the report contains a full glossary of terms pertinent to these systems, explanations of the relevant principles of physics, and a 29-page bibliography divided into subject areas. Its price is \$9.25 a copy; its accession number is PB 252901/AS. WRITE: National Technical Information Service, Springfield, Virginia 22151 U.S.A.

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NEW WASTE PULPING EQUIPMENT -- A new 4-page brochure describes how foodservice waste pulping works, and its special operating and cost advantages to the restaurant. Photos and cut-away drawings illustrate the two new Side-Winder waste pulping systems developed by the Somat Corporation. Also described is a method by which, experience shows, the new units make possible undamaged recovery of 80% or more of flatware accidentally included with the foodservice waste. WRITE: Somat Corporation, Dept. CN, Pomeroy, Pennsylvania 19367 U.S.A.

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CRIMES AGAINST BUSINESS: A MANAGEMENT PERSPECTIVE --

This publication was prepared by the Consumer Goods and Services Division of the Department of Commerce and reports the evaluation by 40 business executives and government officials of such issues and preventive measures as prosecution practices, privacy legislation and employee morale. The proceedings, which examined business vulnerabilities to embezzlement, credit losses, securities fraud, computer abuses and internal and external losses, were designed to assist in the development of effective corporate crime prevention programs. In addition to identifying problems with employment practices and examining government's role in crime reduction efforts, the report includes "question and answer" sessions which provide additional insight into problems of particular concern to business participants. The 250 page publication, Crimes Against Business: A Management Perspective, is available at \$3.60 a copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 U.S.A.

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BULLETIN DESCRIBES NEW EDDY CURRENT CONTROLLER -- Louis Allis has released a 4-page bulletin introducing its new "Mod 7 Eddy Current Drive" controller. The publication describes the controller's extreme versatility, the plug-in modules that permit more than 6900 modification combinations, its compact "mount anywhere" design and exceptional reliability made possible by its 100% solid state design, and the many safety features it incorporates. Also listed in the bulletin are markets for which the controller holds greatest potential value, and a listing of the eight units available in the "Mod 7" series. WRITE: Louis Allis, Dept. CN, Dept. P, Milwaukee, Wisconsin 53201 U.S.A.

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WHAT IS NEW IN THE WORLD OF DESIGN AND IDEAS -- Find out with these two weekly publications from the Patent and Trademark Office. They list new and reissued patents (both with illustrations); indexes of patentees; trademarks issued; and more. The Official Gazette (Patents Section) annual subscription is \$342 first class; \$250 fourth class (add \$88.55 for foreign mailing); and single copy \$6.60. The Official Gazette (Trademark Section) annual subscription is \$88.40 (add \$22.10 for foreign mailing); and single copy \$1.70. WRITE: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 U.S.A.

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LICENSING AND INVESTMENT PROPOSALS

The following firms have contacted the U.S. Department of Commerce and specifically requested assistance in locating overseas agents, distributors, joint ventures, etc. Please publish this information in the Commercial Newsletters. If the post does not publish a Newsletter, please disseminate this information to the local business community through all available channels.

NEW PRODUCT AND LICENSING CONSULTANT - The American firm Intercon Research Associates Ltd. of Evanston, Illinois, has operated as a consultant in new product and licensing since 1962. Intercon Research operates on an international basis and provides business and government organization in Europe, the United States, Japan and other countries with the following types of consulting services: (1) Clients are introduced to serious and attractive new product licensing opportunities researched out in their fields of interest in accordance with a pre-arranged program; (2) Clients are assisted in programs to locate and establish foreign licensees and distributors; and (3) Intercon Associates undertakes surveys to locate foreign acquisition opportunities and assists clients in making joint venture and cross licensing arrangements; (4) Special studies are undertaken with respect to licensee revocation and the establishment of new licenses. Intercon Research operates strictly on the basis of an annual fixed fee retainer. Firms interested in obtaining additional information on the wide range of services can be provided by Intercon Research in the field of licensing and related fields should WRITE: Mr. John J. Brinckerhoff, Jr., Research Associate, Intercon Research Associates Ltd., Dept. CN, 1219 Howard Street, Evanston, Illinois 60202 U.S.A.

SEPTIC SYSTEMS -- A U.S. firm seeks franchises overseas to produce and install a septic tank percolation system. Between 500-600 of these systems are presently in operation in the U.S. They will function in soil that displays poor percolation results, can be installed in small areas and are comparable in price to a conventional septic tank and lateral line systems. WRITE: Mr. Robert Stephenson, Landmark Sales, Dept. CN, 205 Baker Road, High Point, North Carolina 27263 U.S.A.

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NOISE CONTROL PRODUCTS - Company seeks licensees to manufacture and market a full range of products for the control of noise in the HVAC systems of commercial and industrial buildings, laboratories and hospitals. The firm also provides industry with soundproofing enclosures for equipment and for people. WRITE: Mr. Kenneth J. Horowitz, Vice President, Gale Corporation, Dept. CN, Noise Containment Division, P. O. Box 183, North Brunswick, New Jersey 08902 U.S.A.

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TRACTOR SPLITTER - Seeks licensees to produce a patented device for use in disassembling and re-assembling tractors for repair purposes. The mobile unit can be positioned beneath a tractor and provides perfect alignment. Can handle high capacity loads. WRITE: Mr. Bruce Wallace, President, Astra Corporation, Dept. CN, Holly House, Box 155, Hydes, Maryland 21082 U.S.A.

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For Following Countries Only: *Japan, Korea, Indonesia and New Zealand.*

OIL STORAGE TANKS AND PRESSURE VESSELS TECHNOLOGY -- Offers exclusive licenses to provide engineering know-how and design analysis services to steel plate fabricators. The services are for such items as oil storage tanks, pressure vessels, power plant components and pipings. WRITE: Mr. S. W. Chung, Presstec Industries, Inc., Dept. CN, P. O. Box 66, Hinsdale, Illinois 60521 U.S.A.

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ORTHOPEDIC CAST -- Licensing rights are offered foreign firms for a newly developed instant cast for orthopedic applications. The "Thermoform" cast is lightweight while strong and resilient, can be reformed as a patient's condition may require, is nontoxic, allows x-ray penetration and will not decompose in water. The cast can be manufactured in various degrees of porosity and rigidity. The "Thermoform" process is patented in the U.S. and abroad. WRITE: Mr. Bruce Wallace, President, Astra Corporation, Dept. CN, Holly House, Box 155, Hydes, Maryland 21082 U.S.A.

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CONSTRUCTION EQUIPMENT TRAILERS AND ASPHALT ROLLERS -- Established American manufacturer is interested in receiving inquiries from overseas firms in a position to manufacture and market the following product lines under exclusive license: (1) A complete line of one ton to 75-ton capacity trailers for hauling construction machinery; (2) 1 1/2-ton and two-ton rollers for asphalt paving. WRITE: Mr. Robert F. Sharpe, International Marketing Associates, Inc., Dept. CN, 1601 Connecticut Avenue, N.W., Suite 440, Washington, D. C. 20009 U.S.A.

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PLASTIC SHAPES FOR DISPLAY UNITS, LIGHTING FIXTURES, AQUARIUMS, ETC. -- U.S. company with the capability of transforming flat acrylic sheet into one-piece seamless spheres and other shapes would like to provide machinery, tooling and/or other know-how under some sort of licensing agreement. These items range in various sizes and can be made crystal clear, with transparent tints, white, or of any color. They are marketed as product display units, aquariums, terrariums and lighting fixtures. The process is the only one of its kind, is highly efficient, has low labor and capital investment with a high profit margin. WRITE: IBAC Industries, Inc., Dept. CN, 1739 Terrace Drive, St. Paul, Minnesota 55113 U.S.A.

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NEW PRODUCTS U.S.A.

The following product information has been selected by the Department of Commerce for promotion through the New Product Information Service (NPIS). This information is also made available by Commerce on a selected basis to USIA and VOA. While the firms mentioned in CNFS are believed to be reliable, no responsibility can be assumed by the U. S. Government or its representatives for the accuracy of the new product descriptions which are based on information supplied by the listed U. S. firms. Both technical and non-technical products are deliberately included in CNFS to ensure worldwide market applicability. Please reprint as many new product descriptions as possible.



"MED-E-JET" ALMOST PAINLESS INOCULATOR -- According to the manufacturer, this inoculator injects medicine or vaccine into the tissues under high pressure (without needle and syringe) through a nozzle .006-.008 inches in diameter (.15-.20mm diameter) depending on the type of drug being administered. Various types of drugs can be administered by simply changing the medicinal heads within a matter of seconds. The inoculator is equally at ease as an instrument for mass immunization, for administration of insulin by the diabetic who may be blind. Potential end-users are public health agencies, hospitals, individual practitioners and individual diabetics. Current price is \$696. WRITE: Med-E-Jet Corporation, Dept. CN, 12900 Triskett Road, Cleveland, Ohio 44111 U.S.A.

PORTABLE FLOOD-LIGHTING SYSTEM -- The "Maxi-Lite" is a metallic vapor portable flood lighting unit which lights up 328,000 sq ft (363 sq m) at .5 ft (1.5m) candles. It also utilizes four 1,000 metallic vapor bulbs on a 30 ft (9m) mast. "Maxi-Lite" features spring mounted fixtures for maximum bulb protection and maintenance. Power is furnished by a Lister or V M Diesel engine with low oil pressure shutoff. Potential end-users are contractors, miners, and emergency disaster organizations. Price range is \$7,500-\$8,500. WRITE: Allmand Brothers, Inc., Dept. CN, P. O. Box 307, Holdrege, Nebraska 68949 U.S.A.

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SURGICAL SPONGE MACHINES -- This new 4x4 in (10x10cm) single drum machine produces a full 32-ply all gauze sponge at the rate of approximately 50 sponges per minute, using a single web of material 32 3/4 in (83cm) wide. These machine-made sponges, according to the manufacturer, offer the advantages of uniformity in size, weight and fold with no exposed threads or raw edges. Potential end-users are manufacturers of products for the health industry. WRITE: Pratt Export Corporation, Dept. CN, 3097 West Mill Road, Milwaukee, Wisconsin 53209 U.S.A.

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QUICK-DRI HAIR BRUSH -- The "Quick-Dri Thermal Brush" is designed especially for use with blow-drying equipment. The rib construction lets an uninterrupted stream of air flow through the brush to the hair, so hair dries faster. The manufacturer says the ball construction at the end of each bristle prevents hair from being damaged or scalp from being hurt. Suggested end-users are beauty salons and consumers. WRITE: Advance Design Laboratories, Dept. CN, 721 South San Pedro Street, Los Angeles, California 90014 U.S.A.

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ELECTRO-OPTICAL TRANSMISSOMETER -- This Transmissometer provides automated continuous or intermittent visible emissions monitoring for stationary sources. They offer improved sensitivity in 0-30% opacity range over competitive units. Systems are available with varied remote recorder and display instrumentation. Potential end-users are fossil fuel power plants, cement, metals, incinerations. WRITE: Contraves-Goerz Corporation, Dept. CN, 301 Alpha Drive, Pittsburgh, Pennsylvania 15238 U.S.A.

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DUAL MOTOR SPEED CONTROL -- This new solid state speed control is designed to operate two DC traction motors on large battery powered machines. According to the manufacturer, this new control, Model 7951, provides independent current-limit protection for each motor and can also be supplied with plug breaking or resistor dynamic braking to allow motors to provide speed regulation on long downgrades. Standard features include controlled acceleration, automatic emergency disconnect, overtemperature cutback, welded contactor detector and contactor arc suppression. Potential end-users are underground mining, steel mills, foundries, and material handling. Price range is \$2,000 per 100. WRITE: Technical Operations, Inc., Sevcon Division, Dept. CN, 40 South Avenue, Burlington, Massachusetts 01803 U.S.A.

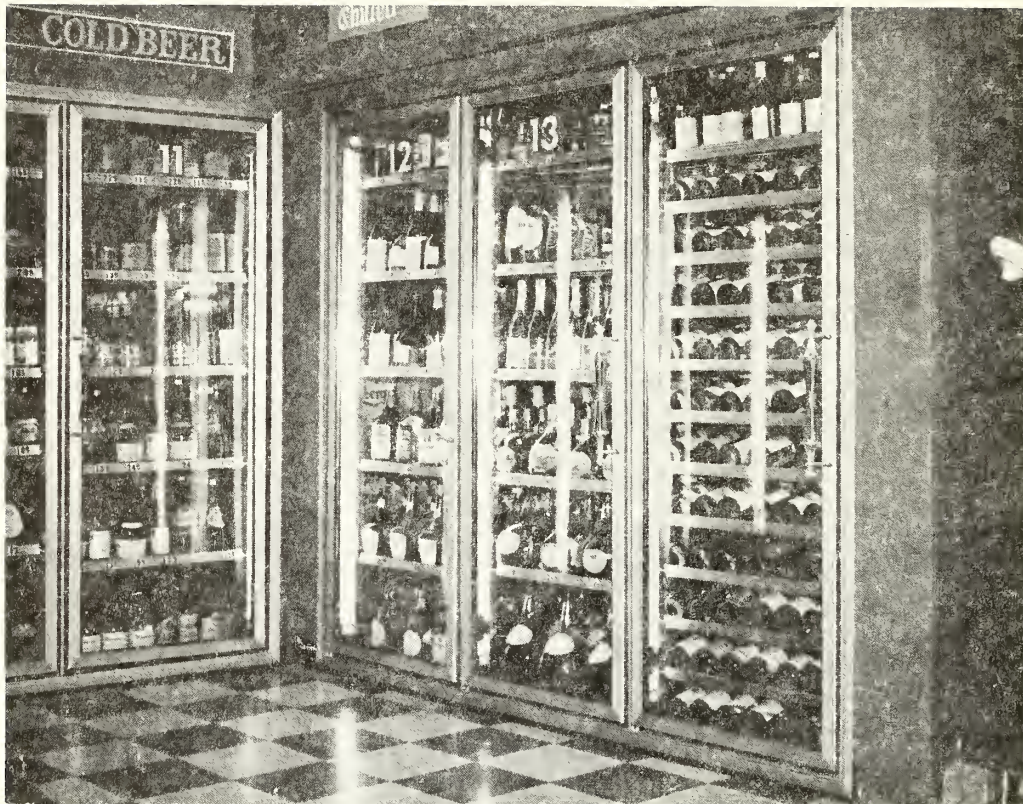
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ACID RESISTANT FREEZE-DRYER -- According to the manufacturer, the Acid Resistant Freeze-Dryers offer the researcher a rugged reliable condenser with a selection of chambers and manifolds to satisfy any freeze-drying application. The Freeze-Dryers provide a visible condensing chamber with titanium coils and polypropylene walls. There is no copper or aluminum in the base units, manifolds, or chambers and maximum trapping efficiency is achieved by expanding the refrigerant directly in the titanium tubing. This unique configuration permits the researcher to perform any freeze-drying technique on any sensitive materials that contain acids without undue concern of its content. Potential end-users are chemists, biologists, biochemistry, etc. Price range is \$3,600. WRITE: FTS System, Inc., Dept. CN, P.O. Box 158, Route 209, Stone Ridge, New York 12484 U.S.A.

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ANTI-THEFT DEVICE FOR AIRCRAFT -- The "Prop-Lok" uses a simple, fool-proof method of discouraging aircraft thefts, according to the manufacturer. The device is a case hardened steel shackle which attaches to one blade of the aircraft's propellor and makes the propellor so unbalanced that flight is impossible. The shape is such that attempting to counter-balance the device is not practical. The padlock securing the device comes with a warning flag to insure that it is not overlooked. The bag that the device is stored in is also printed with a warning and is designed to fit over the aircraft's control wheel or stick. Suggested for light aircraft and small helicopter owners/operators. WRITE: Gould Engineering, Inc., Dept. CN, 4666 Falcon Circle, Mesa, Arizona 85205 U.S.A.

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MODULAR COOLER/FREEZER PANELS -- The manufacturers of these "Walk-In and Reach-In" coolers and freezers say the design features are: all metal clad; fast - easy assembly; heavy - durable insulation; easy to enlarge; relocatable; adaptable for any use; and have a variety of entrance doors. The units are available in virtually any size or shape and the precision formed modular panels, with urethane insulation, are lightweight and easy to handle. All sections have tongue and groove joints for a better, more secure fit. Potential end-users include retailers, wholesalers, hotels, environmental control rooms, drug suppliers, etc. Price range is \$1,000-\$5,000. WRITE: L. Edwin Schaller & Associates, Dept. CN, 1320 Oakland Road, San Jose, California 95112 U.S.A.

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TRACTION STRIPS FOR RUBBER-TIRED VEHICLES -- These "T. G. Strips" are used as an anti-wheel-spin device for vehicles stuck in mud, ice, or snow. The strips are designed to fit small vehicles as well as large ones and can be easily rolled-up and placed in trunk when not in use. Price range is \$50-\$75 for trucks, etc. WRITE: T. G. Strips, Dept. CN, 825 H. Sheridan Road, Lake Forest, Illinois 60095 U.S.A.

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KLEAN-A-PLUG -- This is an unbreakable pocket-sized spark plug cleaner kit used in cleaning fouled spark plugs. It contains file, brush, and enough non-flammable solvent to clean approximately 40 spark plugs. According to the manufacturer, the "Klean-A-Plug" can be used anywhere to get engine running again in a few seconds. Potential end-users are those having two-cycle engine -- boat, motorcycle, chain saw, lawn mower, and spark plug maintenance. Price range \$1.98-\$2.17. WRITE: Jepco, Inc., Dept. CN, P. O. Box 3531, Portland, Oregon 97208 U.S.A.

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MOBILE LIGHT TOWER -- Getting enough light to the job site or emergency situation has always been a difficult problem. Equipment not specifically designed for mobile lighting is usually bulky and inefficient when required to be operational in a short time. According to this company, outdoor lighting problems can now be solved quickly and efficiently with the "High-Lite" Mobile Light Tower. The unit travels to the site on its own heavy duty trailer or your truck bed. The operator opens the high strength ABS housing, turns the key and simply throws a switch to start the generator, turns the permanently mounted light bar to the area required to be lit, turns on the lights and flips the tower switch. Instantly the tower raises to its 30 ft (7.5cm) height and floods the area with enough light to work, play or conduct emergency operations. The entire process takes no more than two minutes. Current base cost is \$7,423. WRITE: High-Lite Corporation, Dept. CN, 23 Selwyn Drive, Greenville, South Carolina 29607 U.S.A.

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"MINIVEIL" AIR CURTAIN SYSTEMS FOR DOORS -- These systems are designed for doorways which require temperature, humidity and climate control. They have, according to the manufacture basically four main uses: 1) to maintain temperature and humidity in a cooler or freezer; 2) act as an insect barrier to prevent crawling and flying insects from entering restaurants, food processing plants, etc.; 3) provide a thermal barrier in large truck doors by preventing the outside air from coming into a conditioned plant atmosphere; 4) prevent drafts from entering through main doors in restaurants, supermarkets, offices, etc., providing customer and employee comfort and fuel savings. WRITE: Berner International Corporation, Dept. CN, P. O. Box 5205, New Castle, Pennsylvania 16105 U.S.A.

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HELIUM VOICE UNSCRAMBLER FOR DIVERS -- "Helle Helium Voice Unscrambler" is designed to unscramble a diver's helium voice at depths up to 2,000 ft (600m). The manufacturer says it is the only system on the market that gives a choice of two modes for great voice reception. Potential users include oil companies, commercial divers, exploratory companies, universities and navies. This unique system electronically compresses the diver's helium distorted voice to normal audio range. Power is supplied by a single rechargeable battery pack for up to 8 hours of continuous use at moderate power output. An important safety feature is the built-in input and output transformers which isolate and protect the divers from electric shock. The manufacturer says an external speaker can be plugged into the system for remote monitoring purposes and a recorder may also be connected when a record is desired of the conversations. Current price is \$3,000. WRITE: Helle Engineering, Inc., Dept. CN, 7198 Convoy Court, San Diego, California 92111 U.S.A.

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CAM OPERATOR CYLINDER ASSEMBLIES -- This is said to be a new, completely enclosed, patented, weatherproof operator for cylinder actuated butterfly valves. The manufacturer says the direct-mounted cam-type operator is designed for on-off and throttling control of Norriseal butterfly valves measuring from 2-24 in (5-60cm). Potential end-users include refineries' chemical plants, pollution control, paper mills, hot and chilled water lines for air conditioning, marine, applications for fire mains, ballast tanks - sea water lines, cargo, etc. WRITE: Dover Corporation/Norris Division, Dept. CN, Box 1739, Tulsa, Oklahoma 74101 U.S.A.

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HYDROSTATIC PIPE TESTING SYSTEM -- The "Unitest" Hydrostatic Pipe Tester is said to be the only commercial unit for testing plastic pipe meeting recently introduced U.S. standards. The firm says this completely self-contained, sturdy, rust-resistant machine automatically tests each length of pipe at high speed at pressures of up to 2000 psi. An alarm signals any defective pipe - while good pipe is automatically ejected (to start the next test cycle). The pipe is completely guarded during operation. Current price is \$37,936 (FOB factory) of unit to test up to 8 in (20cm) pipe. Larger units available WRITE: United Plastics Machinery, Inc., Dept. CN, 1201 Chestnut Street, Philadelphia, Pennsylvania 19107 U.S.A.

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SOIL SAMPLING EQUIPMENT -- The "Backsaver Handle" and "JMC Sampling Tubes" provide an easy and safe method of taking soil samples, according to the manufacturer. The "Backsaver Handle" eliminates bending over to "pull" a core out of the ground; thus, greatly reducing the possibility of back injuries. The sampling tube is pushed into the ground by foot pressure. A special device to clean the sampling tube is mounted on the side of the handle. The handle, equipped with an 18 in (4 cm) sampling tube, can sample to a depth of 46 in (117cm) without contamination from the surface. Samples from a greater depth can be taken by using 26 in (66cm) extensions. The weight of the "Backsaver Handle" and 18 in (45cm) sampling tube is 6.5 lbs (2.95kg). Price is approximately \$90. WRITE: The JMC Services, Corporation, Dept. CN, P. O. Box 425, Baxter, Iowa 50028 U.S.A.

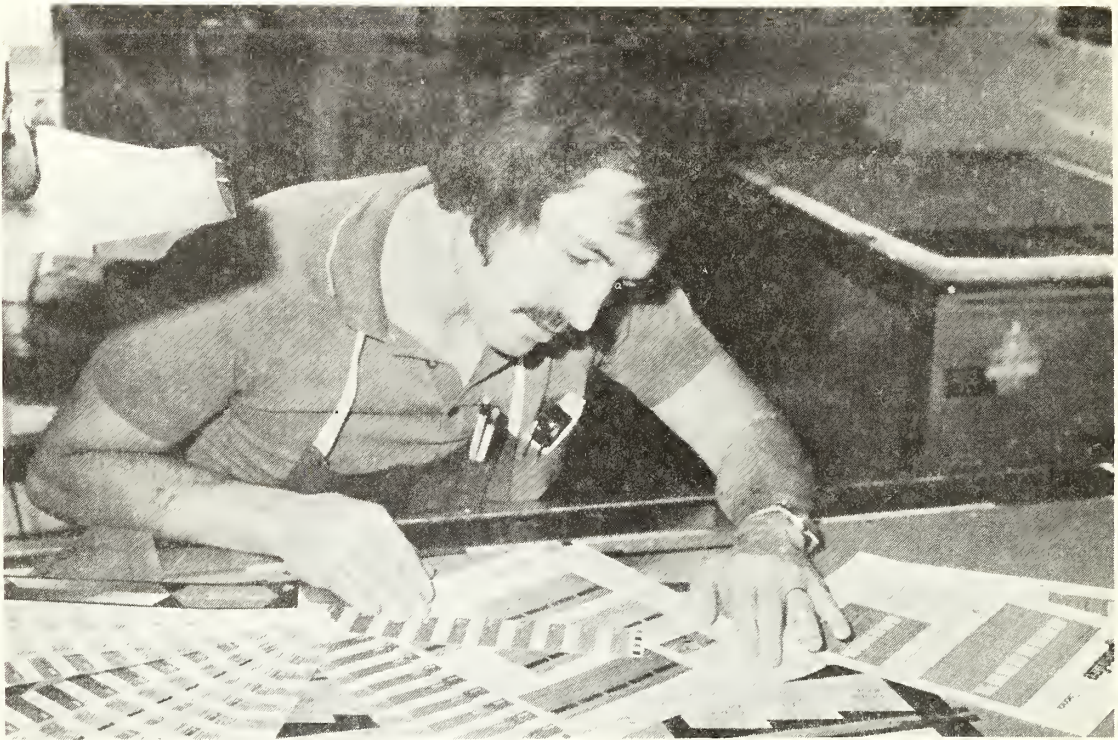
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PHOTON ELECTRONIC CLOCK -- An extremely accurate electronic clock with very large illuminated liquid crystal read-out that can be read in light or dark. Can be read at a distance even by those with poor eye sight. It is well styled so as to fit in any home or office decor. Price is \$60 wholesale; \$125 recommended retail. WRITE: Rollin T. Steinmetz, Dept. CN, P. O. Box 1209, Auburn, Washington 98002 U.S.A.

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AUTOMATIC TELEVISION MOTION DETECTION SYSTEM -- "Telesentry" is an advanced automatic motion detection television system designed for visual security, status surveillance and intrusion detection, according to the manufacturer. Current applications are said to include installations in industrial plants, government facilities, airports, police facilities, warehouses and storage yards and correctional institutions. "Telesentry" performs the routine tasks of numerous security personnel, monitoring as many as sixteen remote cameras simultaneously. Moving objects, or visible changes in the range of a camera such as fire or smoke, automatically actuate an alarm, light the appropriate camera number or numbers on the control panel, and display the scene on a television monitor. When desired, "Telesentry" will automatically sequence camera scenes at selected intervals on a companion monitor. This is all done without requiring constant monitoring by security personnel. Current price range is \$14,577. WRITE: Jacox, Inc., Dept. CN, 1301 S. Patrick Drive, Satellite Beach, Florida 32937 U.S.A.

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SCREEN TINT PROCESS COLOR GUIDE -- The "Pro/Match 200" color guide is said to comprise 7,725 two-three- and four-color (150 line) screen tint combinations graduated in increments of ten, from 10% through 100% (solid), not exceeding the recommended combined total of 200% printer with half of each color bar varnished. It has Control Bar of Process Colors for Denisitometer Readings; Reverse Information and Surprint; and Numbering System. It consists of (Phase I) 1 volume totaling 600 two-color screen tint combinations and lithographed on coated and uncoated paper; (Phase II) 4 volumes totaling 3,120 three-color screen tint combinations and lithographed on coated and uncoated paper; (Phase III) 5 volumes totaling 4,005 four-color screen tint combinations and lithographed on coated and uncoated paper. The complete set is 10 volumes housed in a handsome library case. Suggested for the graphic arts industry, creative artists, color separators and printers. WRITE: Helmar & Associates Export Division, Dept. CN, Fidelity Union Life Building, Suite 1006, 1511 Bryan, Dallas, Texas 75201 U.S.A.

"SAFETY TRIKE TRAC" HELPS TEACH CHILDREN VEHICLE CONTROL AND SAFETY -- Tricycle and wheeled vehicle play for young children becomes a learning experience with "Safety Trike Trac," a starter course for promoting cycle handling skills. The Trac contains directional arrows, a ramp, "Bumpity Bump board" and "Park-It garage" for helping develop left-right awareness, turn and speed control, guidance accuracy and visual discrimination. Components of the "Safety Trike Trac" can be arranged in any number of traffic patterns, on any surface, indoors or out. Suggested as a game for two to eight-year olds, the program also advances perceptual motor and coordinative development. The "Safety Trike Trac's" heavy-duty reinforced vinyl guidepath arrows grip flooring securely, last indefinitely and clean easily. Suggested end-users are kindergarten schools, day care centers, etc. Current price is \$139.00. WRITE: PlayLearn Products, Dept. CN, 29-24 40th Avenue, Long Island City, New York 11101 U.S.A.

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SCREEN AND PAD-TRANSFER PRINTING MACHINERY -- Screen printing machinery is used to decorate completely around an item which can be rolled, such as cylinders and cones, including those items with projections such as cups and also on large, flat objects like game boards. Pad-transfer printing is used for unusually shaped surfaces such as doll faces, golf balls, deeply grained leather, recessed areas, etc., and also for small items such as bottles, syringes, typewriter keys and match faces. These items may be made from most plastics, metal, glass, rubber, wood, leather, cloth and paper. This product is also used for labeling and codification of product containers. Price range is \$5,000-\$30,000. WRITE: Autoroll Machine Corporation, Dept. CN, River Street, Middleton, Massachusetts 01949 U.S.A.

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MOTORCYCLE TIRE CHANGER -- According to the U.S. Company, the "Breezer" eliminates tube pinching and helps prevent scratched rims. It fits all sizes of rims and tires; and is designed to work on the same principle as the hydraulic machines used in gas stations. The tool is inserted with a "spoon" between the tire and rim. After hitting the tool with a hammer a few times, the tire is displaced. Putting the tire on is equally easy. The tool weighs about 9 oz (14g) and is about 9 in (23cm) long. Made out of aluminum. WRITE: Rojen B, Dept. CN, 7061 Hayvenhurst, Van Nuys, California 91406 U.S.A.

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AUTOMATIC POWER PLANT FOR AUTOS -- A portable power unit to operate any electrical equipment up to 3500 watts without electrical shorts, shocks, or damage to vehicle is being marketed by an Oklahoma City firm. The "Auto Pod III" is said to be the only product of its kind on the market that is completely automatic. It can be plugged into a 60 watt light bulb or three 13 amp skill saws at the same time. It provides all the power needed up to 45 amps, automatically, without switches. The "Auto Pod" is said to be the safest portable power unit on the market. The firm says all excess electricity is grounded so that electrical equipment could even be run while standing in water without danger of shock. "Auto Pod III" utilizes a new patent pending concept which prevents any feedback or damage to the alternator of the car, truck, or tractor engine. Suggested end-users include construction, ranchers, oil fields, etc. Current price is approximately \$180. WRITE: JMJ Electronics Corporation, Dept. CN, 205 Bryant Place, Oklahoma City, Oklahoma 73125 U.S.A.

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INSULATING PANELS FOR FURNACES/KILNS -- The firm says these panels are portable, lightweight construction, with no thermal shocking and no spalling, and are durable with long life. They can be moved as a unit or disassembled, stored and reassembled without damage, according to the manufacturer, and there are no metalics used to fasten the insulating fiber or used on the hot face areas. Suggested end-users include manufacturers of steel, ceramics, bricks, glass, etc. Price range is \$100-\$100,000. WRITE: Ceramic Fiber Fabrication Inc., Dept. CN, 1219 Allec Street, Anaheim, California 92805 U.S.A.

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"RETRACTO-SCOOP" FOR DENTAL WORK -- This product is said to be designed for the patient's comfort and the dentist's convenience. The "Retracto-Scoop" Aspiration System includes a retracto-scoop, surgical tip with clearing Stylette, plus base unit. Features are: filters out large pieces of alloy and amalgam; has reusable aspirator and retractor; will not grab tissue; provides greater tooth visibility; restrains tongue while working on crowns. Current price is \$9.25 each. WRITE: Minc Inc., Dept. CN, 2700 Tibbets, Suite 103, Bedford, Texas 76021 U.S.A.

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HIGH STRENGTH AND LIGHT WEIGHT INSULATORS -- "Hi Lite" suspension insulators are said to be applicable to electric transmission lines normally operating on between 138,000 and 1,500,000 volts. Working strengths range as high as 80,000 lbs (36,000kg). These strengths are combined with extreme light weight, running from ten percent to as little as five percent of porcelain mechanical and electrical equivalents. The firm says the immunity to surface leakage tracking is equal to that of glazed porcelain or glass. Elastic properties of the weathersheds are said to render them highly resistant to damage and vandalism. The strong, flexible, fiberglass central member adds the further advantage of high compliance and resistance to breakage resulting from unbalanced strains of a broken conductor. End-users include electric utilities. WRITE: Ohio Brass Company, Dept. CN, 380 North Main Street, Mansfield, Ohio, 44902 U.S.A.

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KEY LOCKS FOR ALUMINIUM FRAMED DOORS/WINDOWS -- It is difficult to securely lock large aluminium framed glass patio doors, which are becoming increasingly popular around the world, according to this firm. The "Lok-Safe" lock has been developed to provide high security for patio doors. The manufacturer says the lock is low cost, easy to install and can be added to any aluminium framed door. The "Lok-Safe" lock is permanently, securely fitted to the door and is said not to hinder normal use of the door. The lock prevents the door from being moved or lifted out of its frame. "Lok-Safe" locks will also secure aluminium framed windows. Price is \$2 - \$4. WRITE: Hamos Company Inc., Dept. CN, 855 Avenue of the Americas, New York, New York 10001 U.S.A.

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HAND PUMP FOR CHEMICALS -- Transferring agricultural and industrial chemicals from drums can be accomplished safely, easily and economically with one of the new polyvinyl chloride hand operated pumps, according to this firm. Available with any one of a variety of adapters for easy connection to any size container, these pumps eliminate the strain and hazards of lifting and tilting drums and carboys. They are designed to transfer most acids, chemicals and corrosives with relative ease. Price is approximately \$22. WRITE: Beckson Manufacturing, Inc., Dept. CN, P. O. Box 3336, Bridgeport, Connecticut 06605 U.S.A.

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DISPOSABLE ARM/LEG SPLINT -- "Kwik-Splint" is a clear plastic inflatable arm/leg splint that is inflated by mouth to create a firm comfortable bandage while immobilizing the injured limb. Being plastic, with no metal parts, it is not necessary to remove the splint prior to x-ray. Perhaps the most significant feature is the splint's ability to withstand up to 60° temperature. Also, not to be overlooked, is the splint's indefinite self-life feature. WRITE: Clear-View Plastics Inc., Dept. CN, 1650 E. 95th Street, Chicago, Illinois 60617 U.S.A.

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WRAPPED TOOTHPICK DISPENSER -- This metal unit repeatedly dispenses wrapped (one envelope at a time) mint-flavored toothpicks. This unit holds 250 wrapped toothpicks and has a top plate hinge for reloading. The wrappers provide space for the name and design of restaurants, hotels, etc., in one or two colors. Refills are available at \$1.84 per 1,000. The dispenser comes in bronze textured finish and the price is approximately \$4. End-users are restaurants and mass feeding facilities. WRITE: Forster Manufacturing Company, Inc., Dept. CN, Wilton, Maine 04294 U.S.A.

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UNIQUE PHOTO - FLASH FOR POCKET-SIZED CAMERAS -- This new photoflash "Flipflash" device contains light flashbulbs and operates with electricity topped from a tiny ceramic cube. The slim unit, about the size and shape of a candy bar, acts as its own flash extender as it stands upright atop new cameras. "Flipflash" is said to add dramatically to the convenience of amateur flash picture-taking. Potential end-users are the general picture-taking public. Price is comparable to other G.E. flash cubes. Company seeking distributors in many international markets. WRITE: E. V. Rehill, General Electric Company, Dept. CN, Nela Park 3220, Cleveland, Ohio 44112 U.S.A.

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METAL CHRISTMAS TREE ORNAMENTS -- These ornaments are approximately 3 in (7.5cm) in size and the metal is highly polished, giving the appearance of pewter. There are 11 ornament designs: angel, dove, star, mouse, grandfather clock, Christmas stocking, snowman, bell, candy cane, Santa Claus. They can also be used as necklace pendants. Each ornament is cast by the sand molding process and has slight undulations on the polished surface which impart pleasingly soft reflections. WRITE: Wilton Armetale, Dept. CN, Columbia, Pennsylvania 17512 U.S.A.

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FOLDING SHOWER DOOR -- "Shower Maid" is a folding shower door or tub enclosure with panels made of rigid vinyl that looks like glass. These come in four fully anodized finishes: silver-satin, gold satin, decorative silver-satin. and decorative gold-satin. Shower Maid can be opened or closed from either side; has magnetic catches on each end of non-rusting stainless steel; and is supported by twin rollers which allow the enclosure to open and close easily and quietly. "Shower Maid" is extremely light and compact so that shipping charges are minimized. Suggested end-users are manufacturers and distributors of windows, patio doors, shower doors, or bathtub. Current price is \$70-\$100. WRITE: American Show Door Company, Inc., Dept. CN 3401 Exposition Boulevard, P. O. Box 2119, Santa Monica, California 90406 U.S.A.

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SHOWER HEADS REDUCE WATER COSTS -- "Nova" Showerheads are uniquely designed, according to this firm, to reduce water use by 60%-70% without diminishing the forcefulness of the shower spray. Finely engineered of solid brass and heavily chromed, these units provide an average flow rate of 2 gal (7.6 l) per minute in contrast with an average standard showerhead which flows at 8 to 12 gal (30.4 to 45.6 l) per minute. "Nova" helps reduce water costs, fuel costs for heating the water and sewage costs. These units weigh 14 oz (392g) and are easily installed on a standard shower arm (1/2 in U.S. pipe thread). Potential end-users include homeowners, hotels, hospitals, military installations, etc. Price is approximately \$16 retail. WRITE: Ecological Water Products, Inc., Dept. CN, 142 Spring Street, Newport, Rhode Island 02840 U.S.A.

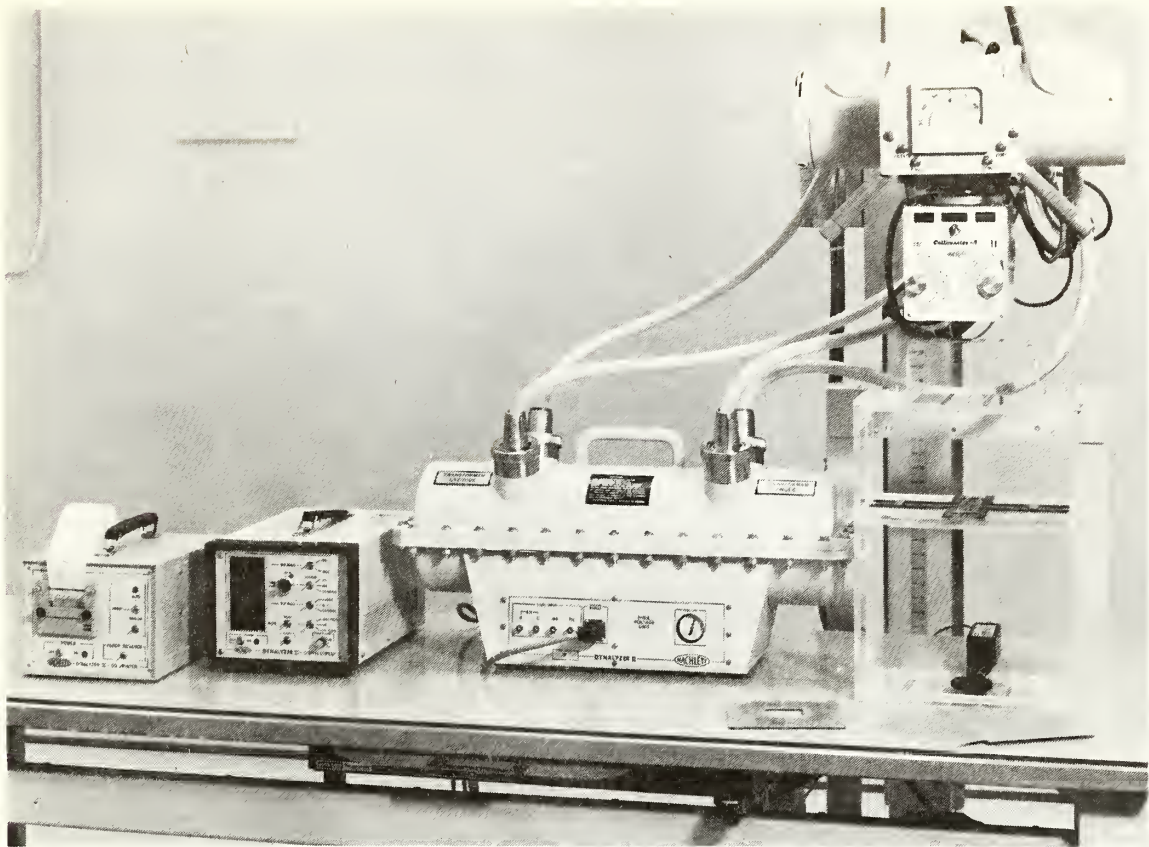
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TELEPHONE CARRIER SYSTEM FOR OVERFILLED CIRCUITS -- The Seiscor Corporation says this Station Carrier System can economically expand existing telephone facilities by a factor of six, while at the same time improving transmission and signaling characteristics and no external power connections are required. The field units are powered over the same circuit used to transmit carrier frequencies. There are no adjustments possible on units so maintenance personnel do not have to be highly trained. Built-in carrier test features enable repairmen to test system by simply pressing button in the central office. The system is very simple to install and easy to maintain and all units carry a full year warranty. Potential end-users include telephone utilities, communication companies, etc. WRITE: Seismograph Service Corporation, Seiscor Division, Dept. CN, P. O. Box 1590, Tulsa, Oklahoma 74102 U.S.A.

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LEARN ENGLISH THROUGH "CASSETTE CLASSICS" -- This supplemental reading program for those who are learning English (ages 5-adult) consists of six different libraries of famous stories acted out by a full cast of professional actors, complete with sound effects and music. Each cassette has a word-for-word, read-along booklet which allows the listener to simultaneously read and hear the English language. Potential end-users are schools and individuals. Price range is \$6.98-\$160. WRITE: Jabberwocky, Dept. CN, 4 Commercial Boulevard, Novato, California 94947 U.S.A.

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X-RAY EQUIPMENT CALIBRATION AND VERIFICATION SYSTEM --

According to the manufacturer, this equipment provides a digital display and recording of actual electrical parameters and radiation output in x-ray equipment. This system is said to be completely shockproof, portable and accurately measures actual x-ray tube KVP (150 maximum), MA (2000 maximum), exposure time (0.001 to 14.99 seconds), MAS, primary beam radiation, filament current (standby and boost), and the equipment electrical line voltage (before and during exposure). A permanent record of measurements is made of each exposure. The Dynalyzer II System weighs 59 lbs (130kg) exclusive of shockproof x-ray cables, and is available for operation on either 115/230 vac, 50-60 Hz using 160 watts of power. Suggested end-users are medical x-ray equipment manufacturers and service technicians. Price is \$8,100. WRITE: Machlett Laboratories, Inc., Dept. CN, 1063 Hope Street, Stamford, Connecticut 06907 U.S.A.

RECORD CLEANER -- According to the manufacturer, the "Vac-O-Rec" is an electric-powered, automatic record-cleaning device which, without harming the record, reaches deep into the grooves to the microscopic level, loosens the microdust particles with its natural mohair brushes, and, via the vacuum cleaning action, removes the dust. When in use, it rotates the inserted record slowly for cleaning. Simultaneously, its static reduction circuit reduces the record's dust-attracting electromagnetism from as high as 20,000 volts to a low, near neutral, voltage. Potential end-users are radio stations and consumers. WRITE: Vor Industries, Dept. CN, 1440 S. State College Blvd., Unit 5-H, Anaheim, California 92806 U.S.A.

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GRASS MOWER LEVELING DEVICE -- The "Grasshopper" can be adjusted to any height or angle to mow grass along curbs or medians. It eliminates damage to blades and other parts of the mower and when not in use, it can be adjusted so that it will not interfere with your regular cutting operation. Once mounted, it becomes a permanent part of your mower, but the "Grasshopper" can be transferred from one mower to another regardless of make or model, according to the manufacturer. The unit is made from 1/4 in (.6cm) cold roll steel with ball bearing wheels and zinc plated for lasting protection. Current price is \$12. WRITE: Fran-Saul Enterprises, Inc., Dept. CN, P.O. Box 11312, Greensboro, North Carolina 27409 U.S.A.

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DATA ACQUISITION SYSTEM -- This is claimed to be the first data acquisition system designed specifically for the DEC LSI-11 and PDP-11/03 microcomputers. It fits directly into the backplane of the computer and extends the use of the computer into scientific applications and industrial automation. This system, according to the manufacturer, multiplexes up to 64 inputs into a high-speed 12-bit analog to digital converter; the converter is interfaced directly to the computer bus; an optional programmable gain amplifier can be supplied with 4 software-controlled gains; and, two 12-bit digital to analog converters can also be supplied on the same board to allow x-y plotting. Current price begins at \$895. WRITE: Adac Corporation, Dept. CN, 118 Cummings Park, Woburn, Massachusetts 01801 U.S.A.

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TOTAL WAY EXERCISER & PHYSICAL THERAPY UNIT -- A "Total Way System" is a portable isotonic exerciser utilizing body weight as resistance against gravity. Physical therapy attachments are adaptable to special Physical Therapy unit. A wide variety of exercises (40 movements) are achieved by altering position of body and changing resistance. The "Total Way System" utilizes all major muscle groups through a full range of motion. Total Way is beneficial in many areas: hospitals, physical therapy clinics, police departments, homes, educational institutions and sports training programs. Current price is \$120.00. WRITE: Total Gym Inc., Dept. CN, 7840 Convoy Court, San Diego, California 92111 U.S.A.

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PLANT CARE WHEELS -- According to this company, the most important tool in home gardening is concise and accurate horticultural information. These wheels provide instant availability of essential information for plant, flower and vegetable growing care. Each wheel is simplistically designed and organized for easy quick reference, and the user does not have to have any experience to use and understand the information. WRITE: L. D. Seymour and Company, Inc., Dept. CN, 1201 Chestnut Street, Philadelphia, Pennsylvania 19107 U.S.A.

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GARDEN ROTOTILLER/CULTIVATOR -- The "Yellowbird" is said to be an extremely compact, versatile, and efficient tiller comprised of a motor unit with self-powering wheels and two rear-mounted easily transferable implements. The first implement, a wide rear-end rototiller, thoroughly breaks up and aerates soil and easily mixes organic material into the soil to a depth of six inches or more. The second implement is said to be a unique cultivator which completely loosens dirt and uproots weeds between rows of crops. The manufacturer says the machine is small and easily maneuverable, and can safely be operated near other crops. The "Yellowbird" is guaranteed for two years, and its 3 H.P. Briggs and Stratton motor for one year by the manufacturer. Company is actively seeking importers, distributors, and/or agents to represent this product. Retail price is \$399. WRITE: Precision Valley Manufacturing, Dept. CN, Springfield, Vermont 05156 U.S.A.

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OPTICAL MEASUREMENT SYSTEM -- The U. S. firm says the "Computing Radiometer" is the first photometer/radiometer on the market with an integral micro-processor which provides superior accuracy, speed and flexibility in light measurement. This power opens up a whole new approach to measuring optical radiation. Simultaneously, it controls the measurement, processes the data, and performs such diverse functions as signal averaging, corrections for different units and measurements modes, control of automatic sensitivity ranging, front panel display formatting and control, and can be programmed to perform the test itself. Current price is \$4,290. WRITE: Gamma Scientific, Inc., Dept. CN, 3777 Ruffin Road, San Diego, California 92123 U.S.A.

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"STAR-TELL" CORDLESS TELEPHONE -- According to the manufacturer, this new portable telephone goes where you go and is ready when you are - up to 300 ft (93m) from your home, office, etc. "Star-Tell" lets you make or receive calls anywhere - in a perfectly normal manner and has no wires, cords or antennas to hinder your actions. Just dial and you have a direct connection. It's light weight, easy to use, and is perfect for gardening, home-work shops, pool side, tennis courts, wheel chair, etc. WRITE: E.D.A. Inc., Dept. CN, 2210 S. Priest, Tempe, Arizona 85281 U.S.A.

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PEPPER CABLE PULLER - ONE MAN CREW -- This is a versatile, self-tailing, portable cable puller, certified to pull loads of 8,000 lbs (3,600kg). According to the manufacturer, the new and unique features include a patented capstan which holds the rope during the pull, not requiring 2 or 3 men to pull on the rope as with a standard winch; constant pull, no slipping; can be set up in 6 minutes or less to accommodate any kind of a pull; does not require clamps, chains or other holding devices; and one man can set up and wheel the unit quickly to the job site. Potential users include commercial or industrial electrical contractors, telephone companies, power and light companies. Current price is \$1,379. WRITE: Pepper Industries, Inc., Dept. CN, 2000 McKinley Avenue, National City, California 92050 U.S.A.

NATURAL AND SYNTHETIC FABRICS -- This firm says their multi-colored, exclusive, fashion prints cannot be imitated by conventional methods and this assures their clients of a unique sales position. This company wants to negotiate agencies and wholesale distributors in all export markets for their newly created novelty fabrics. The company says "the best artists take advantage of our immense technical versatility and provide constantly new designs for local tastes." These fabrics are broad woven, are up to 60 in (152cm) wide, and are to be used in apparel, shirting and home furnishings. WRITE: Keytone Laboratories, Dept. CN, P. O. Box 344, Riverside, Paterson, New Jersey 07524 U.S.A.

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GUARDIAN HOUSING SYSTEMS -- Guardian Housing Systems are a complete pre-packaged structure ready for erection upon arrival at job site. Designed for export, only simple tools and concrete or stucco are needed to erect and complete. Framing consists of all lightweight galvanized steel track, studs, joist, and webbing interface mounted on concrete slab. Metal roof decks finished with lightweight concrete. Interior and exterior walls are finished concrete or stucco. All roofing, flooring, electrical, insulation, plumbing and other hardware furnished, ready to install. Includes all sinks, cabinets, vanities, shower, commode, hot water heater, central air and heat. Provides secure fire resistant, termite free and maintenance free structure. Ideal for residential, commercial, medical, schools, sports arenas, etc. WRITE: Don Webb International, Inc., Dept. CN, P. O. Box 145, Fairborn, Ohio 45324 U.S.A.

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GAS HEATER FOR COMMERCIAL DIVING -- The "DUGH" gas heater represents a dramatic advance in simplicity, versatility and cost according to this company. This is said to be the answer to the serious problems of respirator heat loss and can be easily installed in any currently known diving system and mounted either on the diver or in his umbilical. "DUGH" uses the same hot water to heat both the breathing gas and the diver. It also eliminates the need for costly increased flow rates and eliminates the safety problem of water loss as would be the case in a parallel system. Current price is \$125.00. WRITE: Diving Unlimited International, Dept. CN, 1148 Delevan Drive, San Diego, California 92102 U.S.A.

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"POWER BLADE" UTILITY GRADER -- The manufacturer says this machine will handle the job of three machines and do the work of larger and more expensive pieces of equipment. It is said to have a 4 ft (120cm) inside turning radius; hydraulic tilt, angle, lift and side shift on moldboard; designed by a paving/grading contractor and has unexcelled visibility, maneuverability, simplicity of operation and low maintenance (there are no captive parts). It is suggested for use by asphalt, concrete and grading contractors, general contractor, landscapers, and municipal governments. Current price is \$15,900. WRITE: Puckett Brothers Manufacturing Company, Inc., Dept. CN, Route 1, Highway 124, Lithonia, Georgia 30058 U.S.A.

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MOBILE BANK OFFICE -- According to the manufacturer, the Mobile Bank Office is equipped with teller stations, vault, security equipment, heat, air conditioning, and rest room. It can be easily transported, and can be quickly set-up ready to be fully operational. Its size is 10x50 ft (300x1500cm), and larger sizes are available. Potential end-users are banks, savings and loans, credit unions, construction companies. Price range is POE \$12,000 and up, depending on size and equipment. WRITE: Ron Henry Associates, Dept. CN, 3009 5th Avenue, Beaver Falls, Pennsylvania 15010 U.S.A.

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BURNISHING MACHINE -- According to the manufacturer, these machines are able to burnish material one every 5 seconds or less - to a 2-15 micro-inch (0.05-0.38m) finish. By regulating both roll-pressure and dwell-time, the hydraulic control system assures uniformly burnished parts every time, hour after hour, with an unskilled operator in charge. Potential end-users are automatic electrical appliance, ball bearing and any high productive industry. Price range is \$4,500. WRITE: Wiedeke Plant-Elliott Company, Dept. CN, 1760 Tuttle Avenue, Dayton, Ohio 45401 U.S.A.

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"SQUEEZE-ME" LAMP -- This remote control decorative lamp turns on and off by squeezing a remotely held sound "transmitter." The clean modernistic design makes it attractive in many settings. It is available in either red/white or yellow/white color combinations. Potential end-users are novelties and gift ware. Current price is \$29.95. WRITE: Mark Engineering, Inc., Dept. CN, P. O. Box 308, 34 Tower Street, Hudson, Massachusetts 01749 U.S.A.

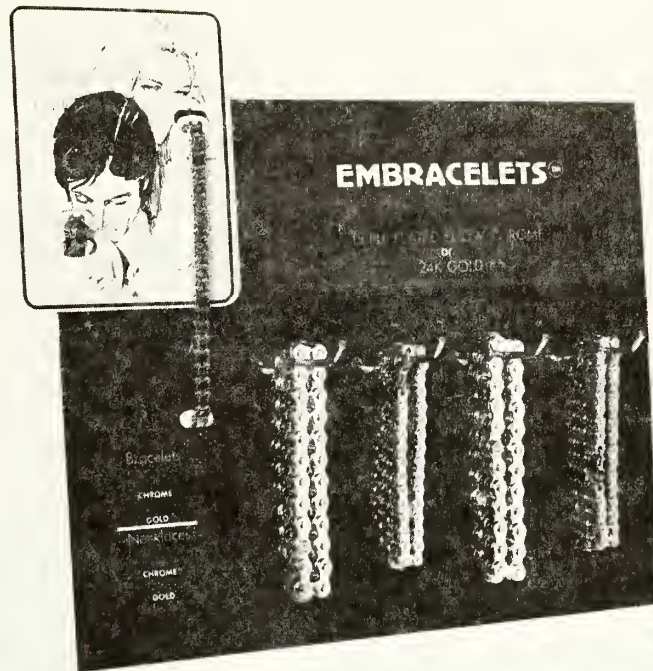
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HIGH INTENSITY SEARCHLIGHT -- According to the manufacturer, the "Mini-Nova MK-11" is a bright portable hand-held searchlight that offers a 2,000,000 candle peak beam and weighs only 4 lbs (1.8kg). It uses a Xenon bulb that operates off 24-volt rechargeable batteries or from an automobile cigarette lighter. Objects as distant as a half mile (800m) are clearly visible at night. Potential end-users are customs, search and rescue, industrial security, photography and television. Price range is \$985. WRITE: Pichel Industries, Inc., Dept. CN, 28007 Front Street, Temecula, California 92390 U.S.A.

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SNAP-ON PIPE AND BOARD INSULATION -- These are high-temperature fiberglass insulations for heated piping and equipment operating at temperatures up to 850°F. According to the manufacturer, these specially formulated heavy density insulations conserve 20% more energy than comparable thicknesses of calcium silicate insulation. Potential end-users are refineries, power plants, and heavy industrial plants. Price range varies by size and thickness. WRITE: Certain-teed Products Corporation, Dept. CN, P.O. Box 860, Valley Forge, Pennsylvania 19482 U.S.A.

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HIS/HER "EMBRACELETS" -- These necklaces and bracelets are said to be unique, triple-plated chrome tone or a high luster gold tone. They are made from timing chains and are suggested for cycle shops, hobby shops, department stores, etc. Price range is \$2-\$12. WRITE: ETA Manufacturing Company, Dept. CN, 602 Jordan Lane, P. O. Box 5261, Huntsville, Alabama 35805 U.S.A.

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CHAIR CLAMPER -- According to the manufacturer, the "Lancaster 1090" clamps all types of dining room chairs; squares and holds the chair while corner blocks are installed; and increases speed and quality of assembling wooden parts. The back pressure units are mounted to swivel to 15°, 30°, and 45° so pressure can be directly applied to all joints to the chair fronts. Variations in leg height are compensated for by adjustable supports. End-users are furniture manufacturers. Price range is \$5,700. WRITE: J. M. Lancaster, Inc., Dept. CN, Drawer 5280, Greensboro, North Carolina 27403 U.S.A.

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ELECTRIC TACHOMETERS FOR RUGGED APPLICATIONS -- These electric tachometers are designed for use in applications where vibration, impact and shock conditions prevail, according to the manufacturer. The new tachometer withstands up to 100 Gs operating shock and up to 20 Gs vibration without effect on accuracy. This tachometer is said to utilize a new concept in d'Arsonval meter movements. It has a precision tapered stainless steel shaft that passes through the bearings on which it turns and the through-shaft design accounts for the tachometer's ruggedness and resistance to shock and vibration. The manufacturer says it is currently in use by several major marine manufacturers, and can be used in a variety of applications including passenger cars, trucks, off-road vehicles, excavators, air compressors, rock drills, compactors, locomotives, as well as mining, construction, logging and other equipment. WRITE: Beede Electrical Instrument Company, Dept. CN, So. Main Street, Penacook, New Hampshire 03301 U.S.A.

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"MIRACLE" ALL PURPOSE POLISHING CLOTH -- This company says this cloth product is chemically treated to clean almost anything. Noted features include removing minor burns and stains from finished wood surfaces leaving a polished finish; never needs to be washed or retreated; no matter how dark the cloth becomes it will work until the unit wears out from uses, if properly stored to retain chemicals. It is said to be harmless to skin and non-toxic. WRITE: J&J Enterprises, Ltd., Dept. CN, 425 High Street, P. O. Box 75, Palo Alto, California 94301 U.S.A.

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TRAFFIC MESSAGE CONTROL SYSTEM -- The "Time-A-Sign" can be programmed to cycle (change to alternate message and back again) as many as three times a day. Enclosed memory mechanism assures that correct message will always be displayed and can not be affected by power failure, vandalism, or weather conditions such as snow and ice. Messages include speed control, such as in school zones, lane, ramp and turning movement control, roadside weigh stations, warning postings, pedestrian traffic, etc. Suggested for use by municipalities, highway and transportation departments. WRITE: VePed Traffic Controls, Inc., Dept. CN, 11313 North Broadway, Oklahoma City, Oklahoma 73114 U.S.A.

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ELECTRIC DISCHARGE MACHINE ACCESSORY -- Owners of electric discharge equipment are offered a new invention called an "Orbitall." This accessory mounts on the machine table and moves the work in an orbital path so as to make the electrode cut a predetermined amount larger than itself. With the turn of a dial, according to the manufacturer, an operator can precisely control the gap between the die and the electrode. Gaps of up to .015 (.3810mm) larger than the overcut and cavities up to .030 (.7620mm) larger than the electrode can be produced without sacrificing surface finish. The firm says the "Orbitall" uses only one machined electrode, where normally two or three are required. WRITE: Orbitall, Inc., Dept. CN, 2438 U. S. Highway 22, Union, New Jersey 07083 U.S.A.

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LEVERWRENCH -- This tool has an automatic size adjustment for locking on any object. The tool is designed for total one hand operation with a single lever for both locking and fingertip quick release. Pressure can be selected quickly for gentle handling of fragile materials or for using up to one ton of pressure. The tool is constructed of heat treated carbon steel with a bright nickel plate finish and its versatile design allows the user to meet specific job requirements in the factory, in the shop, on the farm or in the home. Potential end-users are auto mechanics, plumbers, steel workers, welders, carpenters, etc. WRITE: International Management Services, Inc., Dept. CN, Suite 820, 134 South 13th Street, Lincoln Benefit Life Building, Lincoln, Nebraska 68508 U.S.A.

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SUB-MINIATURE TWO-AXIS VERTICAL GYRO FOR MINIATURE DRONES SYSTEMS -- A new, low-cost sub-miniature vertical gyro that weighs less than 1.5 lb (.7kg) and has a built-in high frequency inverter that allows use in DC guidance and control systems is now available. This all-electric gyro is said to be a real "state-of-the-art" advance in reducing the critical size and weight parameters of vertical gyros used in remote control systems of miniature drones and guidance instrumentation of small missiles. It has precision potentiometric outputs on both pitch and roll axes and roll erection output. Current price is \$1,850. WRITE: Humphrey, Inc., Dept. CN, 9212 Balboa Avenue, San Diego, California 92123 U.S.A.

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METHOD FOR CONTAINING OIL SLICKS -- The "AIRMAX Oil Boom" is designed for efficient oil spill cleanup in harbor or open sea conditions. Each 200 ft (61m) section is stowed in a 2 x 2 1/2 x 4 in (61 x 76 x 122cm) aluminum container from which it can be launched and inflated in six minutes by a 12 VDC/120 VAC blower. AIRMAX flotation is 12 in (30cm) in diameter and incorporates dual air bladders with bladder isolation valves. The draft is 12 in (30cm) and the 200 ft (61m) sections may be joined together without tools. Basic material is tough vinyl coated nylon. The boom is capable of withstanding a 20,000 pound (9,072kg) tensile load. WRITE: American Marine, Inc., Dept. CN, 401 Shearer Boulevard, Cocoa, Florida 32922 U.S.A.

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LOW-COST MICROPROCESSOR PRINTER -- Electronic Product Associates has announced the availability of a new, low-cost 40-column, dot-matrix printer. The printer complete with drive electronics, 6800 microcomputer interface, power supply and attractive hardwood and plastic cabinet sells for \$450 in single quantities. The printer is capable of printing 100 characters per second bi-directionally. Potential users include industrial, educational and R & D organizations. WRITE: Electronic Product Associates, Inc., Dept. CN, 1157 Vega Street, San Diego, California 92110 U.S.A.

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BRAHEN WINDSHIELD REPAIR METHOD -- The "Novus Method" of Windshield Repair consists of highly engineered, but simple-to-operate, kit of tools and expendable materials. The firm says in most cases full windshield transparency is restored in minutes with this method, leaving little or no visible trace of the break. The kit provides the user with repair capability for 10-30 "bull's eye" and "star" breaks in vehicle windshields. Savings to the fleet owner, auto reconditioner, glass replacement shop or auto insurer making a minimum of ten repairs with the basic kit equals the value of approximately eight windshield replacements. This firm says the Novus Method of Windshield Repair has been tested by an independent laboratory in accordance with American National Standards Institute Safety Code for laminated glazing materials and is said to comply with the code requirements. Price is approximately \$150. WRITE: Novus, Inc., Dept. CN, 5301 Edina Industrial Boulevard, Minneapolis, Minnesota 55435 U.S.A.

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"METROLERT" COMPUTER-AIDED EMERGENCY SERVICE OPERATIONS -- The "Metrolert" systems provide computer-aided dispatching of fire and emergency medical vehicles in a manner that is said to minimize initial response time. This is accomplished by the computer tracking all vehicles in the system and selecting for dispatch the closest vehicle. As a by-product of the operation, complete case records and extensive Management Information Records are automatically produced. Price depends on exact configuration of system needed. WRITE: DBA Systems, Inc., Dept. CN, P. O. Drawer 550, Melbourne, Florida 32901 U.S.A.

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WATER PURIFICATION SYSTEM -- These systems, according to the manufacturer, have a wide range of reverse osmosis systems which produce product water with over 90% of the dissolved solids, pyrogens, organics, bacteria, and viruses removed. Potential end-users are hotels, restaurants, municipalities, industry, military, remote camps and off-shore rigs. Price range is \$450 and up, depending on size. WRITE: Water Purification Systems, Inc., Dept. CN, 3451 East 26th Street, Los Angeles, California 90023 U.S.A.

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LEATHER STRIPPING TOOL -- The "Strap-Cutter" is a new kind of leather stripping tool that cuts lacing, straps, or belts from thick or firm leathers, as well as thin, soft leathers. The manufacturer says it is currently being used by hobbyists and production leather shops. The unique double cross-arm design holds a thin cutting blade rigidly and gives complete control of the strip being cut, making the tool easy to use, even for beginners. Maximum capacity is 4" (10cm) wide by 5/16" (8mm) thick. The Strap-Cutter is available in either English or metric models and comes complete with photo-illustrated instructions and 10 blades. Company will provide instructions translated into any required language. Price is \$375/hundred. WRITE: The Leather Works Products Company, Dept. CN, 820 Ramona Street, Palo Alto, California 94301 U.S.A.

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INDUSTRIAL WIRE BROOM -- According to the firm, this broom was originally developed for use in steel mills, but it is also ideal for use in foundries, forging and welding plants, industrial plants, construction sites and municipal streets and parking lots, etc. It is 16 in (40cm) wide, with 80 clusters of high tensile strength steel wire in a smooth sanded, hardwood block. Replacing natural fiber and synthetic bristles which cannot withstand severe heat and abrasive applications, this push broom is supple enough for fine sweepings. WRITE: Flo-Pac Corporation, Dept. CN, 918 North Third Street, Minneapolis, Minnesota 55401 U.S.A.

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STAINLESS STEEL MILK INLET FOR DAIRY MILK PIPELINE SYSTEMS -- This stainless steel milk inlet valve and milk hose adaptor has been tested and used successfully in the United States. According to the firm, it is unique because it will not leak air, is fly proof and very sanitary, opens and closes automatically, and fits pipe from 1 1/2 in to 6 in (4.7cm to 15cm) in diameter. The rubber closure pad can be removed for cleaning without removing the valve. The milk hose adaptor and the valves wash as the pipeline washes. There is no maintenance and only one hose adaptor is used for each milker unit. WRITE: Farmecon, Inc., Dept. CN, 1405 Center Street, Cedar Falls, Iowa 50613 U.S.A.

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DATA PROCESSING DOCUMENTATIONAL HANDLING SYSTEM -- A new documentation handling system "Docu-Mate" has been designed specifically to meet the documentation management and control needs of the data processing industry. It includes cartridges, binders, folders and documentation holders which can be filed interchangeably or intermixed in a wide variety of equipment for both work station and library use, according to the firm. Unique features include a center hook hang filing concept enabling the filing of virtually every type of documentation in intermixed configurations. This allows documentation to move easily from filing to reference mode and vice-versa using the same filing devices. Price range is \$5-\$145. WRITE: Wright Line Inc., Dept. CN, 160 Gold Star Boulevard, Worcester, Massachusetts 01606 U.S.A.

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CARPET-CARE PLANT TRAY -- These new elevated trays protect carpets and floors from mildew and dampness by allowing the air to circulate under the plant tray, keeping the carpet area dry. Unlike pottery, it does not flatten carpet or cause stains. The carpet-care plant tray is made of durable leak-proof plastic, clear or terracotta, and comes in three sizes. WRITE: Stires, Dept. CN, P.O. Box 81066, San Diego, California 92138 U.S.A.

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CARPET AND TILE QUICK-DRY CLEAR ADHESIVE -- According to the manufacturer, this is a non-flammable, non-toxic adhesive cement used to bond foam-backed carpets, as well as sponge-backed floor coverings to concrete and wood. Especially good on big jobs with its superior bonding strength and speed application. Potential end-users are contractors, retail sales, carpet installers, and industrial and commercial sales. Price range \$2.70-\$4.80/gallon. WRITE: Specialty Chemicals Company, Dept. CN, 2500 Delta Lane, Elk Grove Village, Illinois 60007 U.S.A.

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BUILD-IT-YOURSELF HOVERCRAFT -- The "Neova 2" is a small two-seat, Hovercraft that weighs 1,000 lbs (454kg) and can skim at 35 mph (56km/hr) over land, water, ice and snow. This company has available an information pack for \$8 and a comprehensive plan pack for \$50 which contains 88 printed drawings and construction illustrations. "Neova 2" is constructed largely from Marine plywood, fibre glass and mild steel is used for brackets in highly stressed areas. The craft which can carry 430 lbs (196kg) is built of materials available through worldwide outlets. The company says that "Neova 2" can be built in the average home garage in about 1,000 hours using ordinary hand tools. It has a 6 in (15cm) obstacle capability and can float like a boat making it suitable for fishing, duck hunting and for many industrial applications. The designers claim that with used parts the craft can be constructed for \$700, rising to \$3,000 as new parts are substituted. WRITE: Neoteric-USA, Inc., Dept. CN, Fort Harrison Industrial Park, Terre Haute, Indiana 47804 U.S.A.

* *

"HEMOCCULT" KIT AIDS IN DETECTING COLO-RECTAL CANCER -- According to this firm, the "Hemoccult" is a useful aid in early detection of colo-rectal cancer. Serial stool screening with "Hemoccult" guaiac paper slides is said to offer patients and physicians a simple, inexpensive, esthetically acceptable way of detecting occult fecal blood as may occur in colo-rectal cancer in its early stage when surgical treatment is most likely to be successful. The kit can be used in the doctor's office, hospitals, and in mass screening programs. WRITE: Smith Kline Instruments, Inc., Dept. CN, 880 West Maude Avenue, Sunnyvale, California 94086 U.S.A.

* *



WATER DISPENSER FOR ROAD-TYPE VEHICLES -- According to the manufacturer, the "Car Fountain" utilizes the water condensation from any vehicles air conditioning system, then runs the water through a patented filtrate media and produces clean, fresh, drinking water while you travel. All material used in the mechanics of the Car Fountain are said to be U.S. Government approved. WRITE: Condensate, Inc., Dept. CN, 6451 North Federal Highway, Fort Lauderdale, Florida 33308 U.S.A.

* *

SNOW-MAKER FOR CHRISTMAS TREES -- The manufacturer says this is a simple attachment and can be used on any 6-7.5 ft (1.8-2.1m) Christmas tree and allows artificial snow to recirculate continuously over the tree. Included are angel tree top, tube for attachment to tree trunk, recirculating motor, catch basin and snow. Easy to assemble. End-users are retail stores. Price is \$12 FOB Boston and minimum order accepted is 24 pieces. WRITE: Bradford Novelty Company, Inc., Dept. CN, 451 D Street, Boston, Massachusetts 02210 U.S.A.

* *

AC AND DC CONTACTORS -- These electrical contactor designs are said to be adapted from many years of aerospace contactor design experience to industrial uses. Application in battery powered forklift trucks and mining equipment, SCR drives, welding and plating equipment, military and commercial generator sets. Ratings: 50 to 1000 amperes with voltages to 125VDC and 600VAC. Basic models are rated at 75, 150, 300 and 500 amperes and special models rated up to 1000 amperes. Approximately 150 models are available with vertical or horizontal mounting, open construction, or gasket sealed and vented construction. These designs may be mounted in any direction. Price range is \$14-\$150. WRITE: HB Electrical Manufacturing Company, Inc., Dept. CN, 1125 National Parkway, Mansfield, Ohio 44906 U.S.A.

* *

MODULAR ELECTROSTATIC PRECIPITATORS TO FILTER AIR POLLUTANTS -- According to the manufacturer, the modular Electrostatic Precipitators, when installed in the air stream of an existing industrial process flow or exhaust, will collect all condensable matter down to .03 microns in size. Block modules can be assembled to clean air streams ranging from 3,400-68,000m³ per hour (2,000-40,000m³ ft per minute). Where absolute air purity is required (up to 98 percent of clean air), the modules can be assembled in triple sequence, can be used to filter smoke, dust, ink-mist, dry pollutants in the air, etc. Price range is \$2,000-\$40,000. WRITE: Ferrex International Inc., Dept. CN, 253 Broadway, New York, New York 10007 U.S.A.

* *

120-DAY MECHANICAL WEATHER STATION -- These Weather Stations are lightweight, portable, mechanical instruments for recording rainfall, relative humidity, wind direction, cumulative wind, temperature and barometric pressure on a strip-chart, independent of any external source or power. The electro-mechanical, battery-rewound clockwork paper drive allows up to four months of continuous operation. Designed for portable use in the field of agriculture, forestry, hydro-logical, environmental impact, urban planning, and environmental surveys in remote areas. Price range is \$2,800-\$3,500. WRITE: Kahlsico International Corporation, Dept. CN, P. O. Box 947, El Cajon, California 92022 U.S.A.

* *

RUBBER INJECTION MOLDING PRESS -- According to the manufacturer, the "Pentaject" Rotary Injection Molding System features a patented, fast-acting, 5-station rotary injection press that is complemented by low-cost quick-change tooling and self-cleaning mold valves. The press uses a vertical acting, reciprocating screw injector mounted to a main frame that also encloses the main clamp cylinder to which the rotating turntable is attached. Molds are opened and unloaded at one station. There are no hydraulics in the rotating carousel. All hydraulic, electric and process controls are housed in the cabinet. Individual mold temperature and shot volume controls enable 5 different jobs to be run in the press. End-users include companies that manufacture or purchase rubber-molded products and parts. Recent price range approximately \$61,000-\$176,000. WRITE: Uni-World Industries, Inc., Dept. CN, One World Trade Center, Suite 5205, New York, New York 10048 U.S.A.

* *

PET PROTECTOR IDENTIFICATION (I.D.) TAGS -- This brilliant red-orange safety reflector helps prevent animals from injury by car as well as loss. These I.D. reflector tags are also great for small children, bicycles, luggage, and any other place you might want an address tag or a safety reflector. According to the manufacturer, this reflector is visible up to 650 ft (198m) in car headlights; is 100% weatherproof molded vinyl; and fastens securely to collar or harness in an instant. Company is seeking distributors. WRITE: American Pet Products, Dept. CN, Dept. 27-10, Box 522, Capitola, California 95010 U.S.A.

* *

CURING SYSTEM USED IN PRINTING -- This unit consists of a sheet conveyor, UV-curing station and automatic sheet delivery. According to the manufacturer, the speed of the UV-curing System is electronically synchronized with the press. It is available for any size of printing press and can be wheeled out of the way when the printing press is used for conventional inks only. All units are available with 6, 4, or 2 lamps; as well as upper and lower lamp positions for two-side-printing-operation. Price ranges from \$10,000-\$40,000. WRITE: Josch Industries, Inc., Dept. CN, 24871 Gibson Drive, Warren, Michigan 48089 U.S.A.

* *

TELEPHONE STATION CARRIER FOR SINGLE-PARTY OR BUSINESS

SUBSCRIBER -- The "CM-24 Station Carrier" is a compandored, double-sideband, amplitude modulated system that provides 24 channels on a single, non-loaded cable pair on a centralized point-to-point basis. The basic system consists of a central office terminal, system repeaters, and a subscriber terminal. The system is totally powered from the central office 48V battery. Common power converters, ring supply and linedrivers can be supplied redundant with automatic transfer. Potential end-users are operating telephone companies or foreign PTT Administration. Price range is \$350/channel. WRITE: Continental Telephone Electronics, Dept. CN, 1001 Pamela Drive, Box 729, Euless, Texas 76039 U.S.A.

* *

MICROCOMPUTER SYSTEM -- According to the manufacturer, the "Jupiter II" is the first low-cost microcomputer system to have the capabilities of a minicomputer system in kit or assembled form. The "Wave Mate Jupiter II" has small wirewrapped cards for flexibility and reliability; four-voltage power regulation available on every card; a read-only memory debugger-monitor for easy start up; and ferro-resonant power supply that ensures immunity from line voltage fluctuation. Each module has detailed assembly, operation, and trouble-shooting manuals. Potential end-users are home users, small businesses, etc. Price range is \$1,200 up. WRITE: Wave Mate, Dept. CN, 1015 West 190th Street, Gardena, California 90248 U.S.A.

* *

MAIL SORTING MACHINE -- This sorter is operator controlled to sort mail from 6x9 in (15x23cm), to 12x15 in (30x38cm), up to .375 in (1cm) thick and up to 12 oz (.35kg) weight. Mail in this category is referred to as "Flats," which are faced and loaded onto a conveyor. A jogger built into the conveyor edges the flats, then the operator examines each piece and keys the bin destination. A four-fold increase in speed is realized over manual operations with less operator effort. Potential end-users are postal systems and recipients of mail in large volume. Price is approximately \$55,000. WRITE: Universal Business Machines, Inc., Dept. CN, P.O. Box 6616, Columbia, South Carolina 29260 U.S.A.

* *



"SCRATCH 'N SMELL" T-SHIRTS -- These T-shirts have various scented designs printed on them and by scratching the design the scent indicated by the design can be smelled (such as "Leo de Lemon"). The firm says they will continue to smell after multiple washings and are of good quality material with less than 5% shrinkage. A wide variety of smells are available. T-Shirts cost approximately \$5-\$6. Suggested for department stores, boutiques, etc. WRITE: Scratch 'N Smell International, Dept. CN, 1088 East 31st Street, Miami, Florida 33013 U.S.A.

* *

HEAVY DUTY DISINTEGRATOR -- According to the manufacturer, this disintegrator will destroy 8-10 lbs (3.6-4.5kg) of books in seconds; burn bags, mylar tape, full reels of film, coding machines, light metal, and three-ring binders. It has a very low cost maintenance, and the installation is extremely flexible. This is not a shredder but a ruggedly built, heavy-duty total disintegrator. Potential end-users are government, military, banks and corporations. Price range is \$35,000-\$55,000. WRITE: L&F Industries, Dept. CN, 2110 Belgrave Avenue, Huntington Park, California 90255 U.S.A.

* *

TURBO-DRYER -- The Turbo-Unit is designed for continuous, small-scale processing of solids requiring drying, heating, cooling, curing, subliming, agglomerating, calcining, freezing, activating, regenerating, etc. According to the manufacturer, it represents the smallest Turbo-Dryer designed to handle approximately 25-200 lbs/hour (12-90kg/hour). Its weight is slightly under 1,000 lbs (450kg). The Model "K" is suited for small volume production and for testing of a wide assortment of feed materials such as wetcakes, sticky pastes, pellets, sludges, crystals, etc. Potential end-users are manufacturers, chemical, drugs, foodstuffs, and feeds industries. Price range is \$5,000 and up. WRITE: Wyssmont Company, Inc., Dept. CN, 1470 Bergen Boulevard, Fort Lee, New Jersey 07024 U.S.A.

* *

IMPLANT NEEDLE FOR TREATING TUMORS -- According to the manufacturer, the new "Scott Implant Needle" provides a simple method for implanting Iodine-125 seeds and other radioactive sources into a tumor at precisely 1.0cm separations with one simple movement, providing faster implantation, more uniform seed matrix, less radiation exposure, and eliminating the more complicated and cumbersome cartridges, ratchet retractors and spacers. Potential end-users are all radiation therapists and cancer researchers. Current price is \$150. WRITE: Velotron Machine Corporation, Dept. CN, 6517 Fort Hamilton Parkway, Brooklyn, New York 11219 U.S.A.

* *

UNDERWATER CEMENT -- This underwater cement, according to the manufacturer, stops hydrostatic leaks under pressure underwater, and is used in the restoration and preservation of concrete and steel structures. The cement bonds mechanically to concrete steel and wood above and below water level; sets in 4 minutes; produces no heat of hydration or shrinkage; gives over 5000 psi in 28 days - 4000 psi in 4 days; and can be used in temperatures down to freezing 32 degree F (-1 degree C). The firm says it can be hand applied, troweled, gunnited, slip formed, form pressed, etc. Potential end-users are water/sewer contractors, pipeline/marine contractors and underwater construction. Price range is \$10/50 lbs. WRITE: Underwater Epoxy-Crete Systems, Inc., Dept. CN, P. O. Box 1715, Houma, Louisiana 70360 U.S.A.

* *

"VARI-TOOTH" BAND SAW BLADE -- This new saw blade has unique innovations that combine various tooth sizes and set angles within one blade. Its most notable feature, according to the manufacturer, is its ability to cut varieties of metals without changing blades. The bi-metal blade produces finer, smoother cuts which eliminate vibration, pull, and chatter, in addition to reducing cutting noise. Potential end-users are metalworking industries. Price range \$1.50 per foot. WRITE: American Saw and Manufacturing Company, International, Dept. CN, East Longmeadow, Massachusetts 01028 U.S.A.

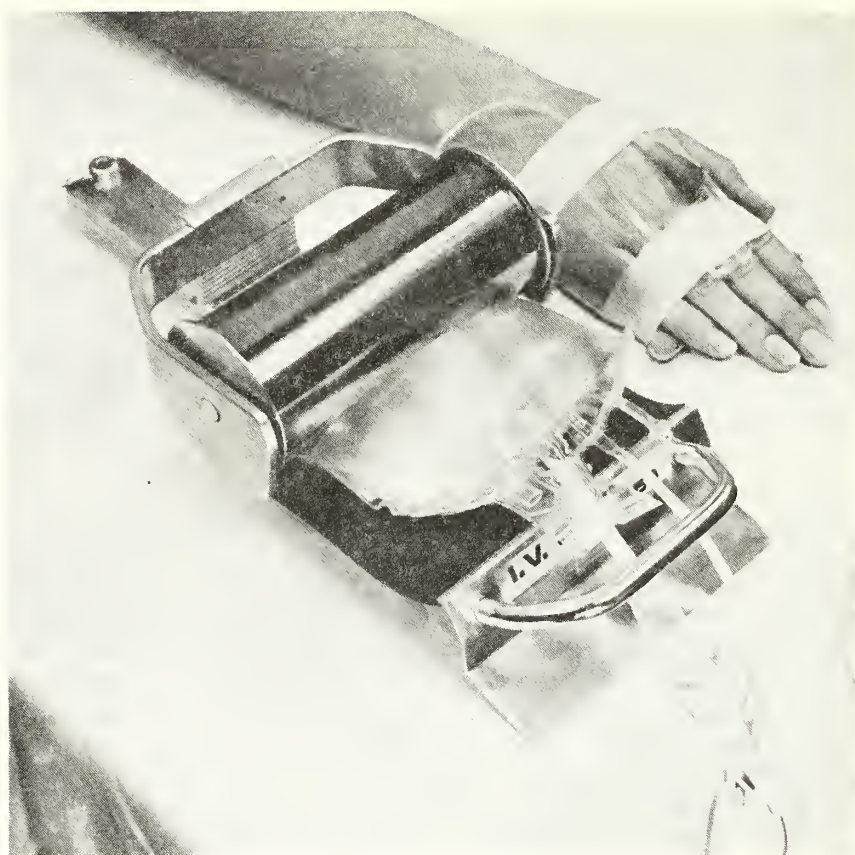
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"MEDISC" - DRUG INTERACTION DISC -- Clinicians are becoming increasingly aware of the hazards which may occur as a result of prescribing more than one drug. This small rotary slide rule depicts interactions among 77 common drugs or categories of drugs used in modern clinical practice. According to the manufacturer, this pocket-size device is intended as a ready and simple first reference for health-care professionals only. By matching two plastic dials, the operator can determine whether a given combination of drugs is safe, potentially dangerous, has an interaction of uncertain clinical significance or results in diminished or enhanced effects of either drug. Potential end-users are health professionals such as doctors, pharmacists, nurses, etc. Current price is \$6.95. WRITE: Excerpta Medica Services, Inc., Dept. CN, 228 Alexander Street, Princeton, New Jersey 08540 U.S.A.

* *

STEEL ELECTRO-MECHANICAL KITCHEN/BATH CORE -- This is a structurally independent unit (8 x 12 x 8 ft high) and includes all items requiring technical installation procedures for the bath, utility and kitchen areas of homes and apartments. The unit requires no depression in the flooring as all service connections are made above grade. Actual placement in the field is accomplished by a unique top lift method requiring only normal construction equipment. The electrical and mechanical equipment is varied to meet the requirements of both the country and the project. All equipment used is manufactured in the U. S. According to the manufacturer, fabrication, assembly and installation are completed under rigid quality control procedures which include full-system testing prior to shipment. Suggested end-users are builders, home owners, etc. Price is \$6,000. WRITE: Besteel, Dept. CN, 18233 East Railroad Street, Industry, California 91744 U.S.A.

* *



SELF-CONTAINED, PORTABLE INTRAVENOUS (I.V.) PUMP -- The "I.V. Stat" is a self-contained, portable I.V. pump that generates a constant, safe pressure on flexible infusion bags, up to 1,000 cc, at a steady flow rate. It is suitable for use in emergency rooms, operating rooms, intensive care units, emergency vehicles, cardiac care units and for bedside I.V. therapy. The "I.V. Stat" has a unique, constant force spring that continually exerts a predetermined pressure on blood, plasma or I.V. solution flexible bags, without adjustment, until the bag is completely empty. It provides the same constant pressure whether the bag is full or partially infused and can be used with any standard I.V. tube set. Simple to use, it can be placed in operation within ten seconds without "wind up" or "pump up." There are no electrical wires or batteries required because it is completely mechanical device. Price is \$95.00. WRITE: I.V. Stat Corporation, Dept. CN, P. O. Box 961, La Jolla, California 92038 U.S.A.

"VAC-U-FIL" FUEL TRANSFER UNIT -- This fuel transfer unit uses the vacuum from the engine of a truck carrying a supply of fuel to effect safe, easy and economical refueling of tractors and other motorized farm machinery in the field. The unit is said to be capable of transferring 8 gal (30.3 l) of fuel per minute, can be left unattended and shuts off automatically to prevent overfill. The complete unit weighs only 15 lbs (6.8kg), including 12 ft (3.7m) of fuel hose, and is adaptable to fit any make or model of farm machinery. Current price is \$88.00 FOB Seattle. WRITE: K. S. Haskins Distributing, Inc., Dept. CN, P. O. Box 11261, Spokane, Washington 99211 U.S.A.

* *

AIR POLLUTION CONTROL SYSTEM -- This advanced system for air pollution control is presently in use in foundries, glass plants, food processing, printers and hundreds of other installations. According to this firm, the "Apsee Air Charger" is said to control odors, dust and smoke, micro-organisms, static electricity, and carbon gases. This manufacturer says compared to other air pollution control methods, including bag houses, electro-static precipitators and scrubbers, the original cost averages 80% less; energy used to operate this system and maintenance costs are also more than 80% less than the other systems. The 30 Apsee models simply plug into existing 110 or 220v AC supplies. The firm says the Apsee units are so simple to use that anyone can order and use them for good results without the need for installation engineers and other expenses. Price range is \$3,750. WRITE: Apsee Inc., Dept. CN, 8108 Mercury Court, San Diego, California 92111 U.S.A.

* *

CASSETTE TAPE CARRYING/STORAGE CASE -- The main features of this new durable "Kset" carrying and storage case are said to be: cassette tapes will not fall out and are securely held in place; the individual library tape storage box is eliminated (which many customers prefer); two single units will snap together without tools or glue to form a double unit and each unit will hold one dozen cassettes. Suggested for students, executives, music oriented consumers, etc. WRITE: New Product Marketing, Inc., Dept. CN, 2 Greenridge Road, Cartersville, Georgia 30120 U.S.A.

* * * *

PEOPLE



Edward O. Vetter Assumes Post as Under Secretary of Commerce.

Edward O. Vetter was nominated by President Ford to be Under Secretary of Commerce on June 23, confirmed by the United States Senate for the position on June 30, and administered the oath of office by Secretary of Commerce Elliot L. Richardson on July 7, 1976.

As the second-ranking officer in the U.S. Department of Commerce, Mr. Vetter is involved in all Department activities which include promotion of foreign trade, energy problems, economic affairs, maritime affairs, patents, minority enterprise, standards and weights and measures, ocean and weather research, and travel promotion.

Mr. Vetter is the first person with an engineering-business background to serve as Under Secretary of Commerce since the mid-1950's. He is a 1942 graduate of the Massachusetts Institute of Technology, holding a Bachelor of Science degree in mechanical engineering.

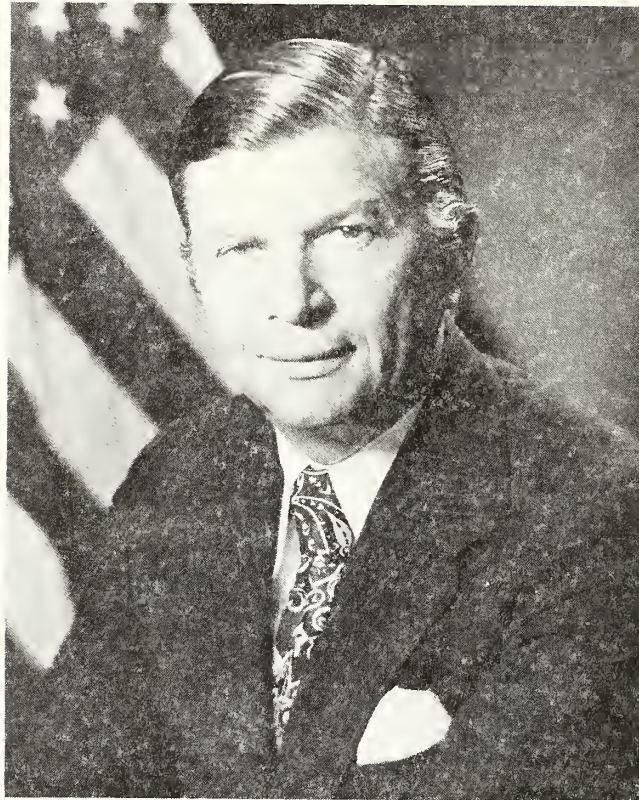
Mr. Vetter, 55, of Dallas, Texas, was previously Executive Vice President and Chief Financial Officer of Texas Instruments, Inc., until his retirement from the firm in November 1975. He has 28 years of business experience -- 23 of which were acquired with Texas Instruments -- in such areas as international trade, energy development, science and technology, capital formation, trade in the Mideast, and East-West relations.

Under Secretary Vetter joined Texas Instruments in 1952 in Geophysical Services, Inc., a major world-wide petroleum exploration contractor and a subsidiary of Texas Instruments.

From 1957 to 1959, he was General Manager of the Industrial Instrumentation Division in Houston, Texas. He was named President of Metals & Controls, Inc., a Texas Instruments' subsidiary in Attleboro, Massachusetts, in 1959, holding the post until 1966. He was then appointed Group Vice President for Materials & Services and was President of Geophysical Services, Inc., serving in this capacity until 1972.

He has been a trustee of Ursuline Academy Permanent Endowment Fund, a member of the Jesuit College Preparatory School Advisory Board, Chairman of the National Affairs Committee of the Dallas Chamber of Commerce, a member of the Executive Board of the International Trade Conference of the Southwest and the Commerce Department's Regional Export Expansion Council, and has served as director of several corporations.

Born on October 20, 1920, in Rochester, New York, Mr. Vetter is married to the former Mary L. Brite, and they have four daughters.



Leonard S. Matthews, new Assistant Secretary for Domestic and International Business.

Mr. Matthews was born on January 6, 1922, in Glendean, Kentucky. He attended Indiana University for two years prior to World War II. After four years of service he entered Northwestern University and graduated Summa Cum Laude in 1948.

Prior to joining Commerce, he served as consultant to the Leo Burnett Company, Inc., a Chicago-based advertising agency after previously serving as President from 1970 to 1975, and as Vice Chairman of the Board from February 1975 to January 1976. Prior to that, Mr. Matthews held various positions with the Leo Burnett Company Inc. which he joined as a research analyst in 1948.

Mr. Matthews has been director-at-large of the American Association of Advertising Agencies; a Vice Chairman and member of the Executive Committee of the Advertising Council; a director of the Council of Better Business Bureaus; and a trustee of the Marketing Science Institute, Better Government Association of Chicago, and Chicago Educational Television Association. He is married to the former Dorothy Fessler, and they have three children.

INDEX

"NEW PRODUCTS U.S.A."

<u>Product</u>	<u>Firm Name</u>	<u>Page</u>
Med-E-Jet Inoculator	Med-E-Jet Corporation	23
Portable Flood-Lighting System	Allmand Brothers, Inc.	24
Surgical Sponge Machines	Pratt Export Corp.	24
Quick-Dri Hair Brush	Advance Design Lab	24
Electro-Optical Transmis- someter	Contraves-Goerz Corp.	24
Dual Motor Speed Control	Technical Operations	25
Freeze-Dryer	FTS System, Inc.	25
"Prop-Lok"	Gould Engineering, Inc.	25
Cooler-Freezer Panels	L. Edwin Schaller and Associates	26
"T.G. Strips"	T. G. Strips	26
Klean-A-Plug	Jepco, Inc.	27
Mobile Light Tower	High-Lite Corporation	27
"Miniveil" Air Curtain Systems for Doors	Berner International Corporation	27
"Helium Voice Unscrambler"	Helle Engineering, Inc.	28
CAM Operator Cylinder Assemblies	Dover Corporation/ Norris Division	28
Hydrostatic Pipe Tester	United Plastics Machinery, Inc.	28
Soil Sampling Equipment	JMC Services, Corp.	29
Photon Electronic Clock	Rollin T. Steinmetz	29
Television Detection System	Jacox, Inc.	29
Screen Tint Color Guide	Helmar & Associates Export Division	30
"Safety Trike Trac"	PlayLearn Products	31
Screen Printing Machinery	Autoroll Machine Corp.	31
Motorcycle Tire Changer	Rojen B	31
Portable Power Unit for Autos	JMJ Electronics Corp.	32
Insulating Panels for Furnaces/Kilns	Ceramic Fiber Fabrication, Inc.	32
"Retracto-Scoop" for Dentists	Minc Inc.	32
Suspension Insulators	Ohio Brass Company	33
Key Locks	Hamos Company Inc.	33
Hand Pump for Chemicals	Beckson Manufacturing	33
Arm/Leg Splint	Clear-View Plastics	34
Toothpick Dispenser	Forster Manufacturing	34
Flash for Pocket-Sized Cameras	General Electric Co.	35
Christmas Tree Ornaments	Wilton Armetale	35
Folding Shower Door	American Show Door Co.	35
Showerheads	Ecological Water Products, Inc.	36
Station Carrier System	Seismograph Service	36
"Cassette Classics" Reading Program	Jabberwocky	36

INDEX

"NEW PRODUCTS U.S.A."

<u>Product</u>	<u>Firm Name</u>	<u>Page</u>
X-Ray Equipment	Machlett Laboratories	37
Record Cleaner	Vor Industries	38
Grass Mower Leveling Device	Fran-Saul Enterprises	38
Data Acquisition System	Adac Corporation	38
Portable Exerciser	Total Gym, Inc.	39
Plant Care Wheels	L. D. Seymour and Co.	39
Garden Rototiller/Cultivator	Precision Valley Manufacturing	40
Optical Measurement System	Gamma Scientific, Inc.	40
Cordless Telephone	E.D.A. Inc.	40
Portable Cable Puller	Pepper Industries, Inc.	41
Natural/Synthetic Fabrics	Keytone Laboratories	42
Guardian Housing Systems	Don Webb International	42
Gas Heater for Diving	Diving Unlimited Int'l	42
Utility Grader	Puckett Brothers Mftg.	43
Mobile Bank Office	Ron Henry Associates	43
Burnishing Machine	Wiedeke Plant-Elliott Co	44
Remote Control Lamp	Mark Engineering, Inc.	44
Portable Searchlight	Pichel Industries, Inc.	44
Fiberglass Insulations	Certain-teed Products	44
His/Her Jewelry	ETA Manufacturing Co.	45
Chair Clamper	J.M. Lancaster, Inc.	45
Electric Tachometers	Beede Electrical Instru- ment Co.	46
Polishing Cloth	J&J Enterprises, Ltd.	46
Traffic Message Control System	VePed Traffic Controls	46
Electric Machine Accessory	Orbitall, Inc.	47
Leverwrench	Int'l Management Services, Inc.	47
Sub-Miniature Vertical Gyro	Humphrey, Inc.	47
Method for Oil Spill	American Marine, Inc.	48
Microprocessor Printer	Electronic Product Associates, Inc.	48
Windshield Repair Kit	Novus, Inc.	48
Computer-Aided Emergency Operations	DBA Systems, Inc.	49
Water Purification System	Water Purification Systems, Inc.	49
"Strap-Cutter"	The Leather Works Products Co.	50
Wire Broom	Flo-Pac Corporation	50
Milk Inlet for Dairy Milk	Farmecon, Inc.	50
Documentation System	Wright Line, Inc.	51
Carpet-Care Plant Tray	Stires	51

INDEX

"NEW PRODUCTS U.S.A."

<u>Product</u>	<u>Firm Name</u>	<u>Page</u>
Adhesive Cement	Specialty Chemicals Co.	52
Hovercraft	Neoteric-USA, Inc.	52
"Hemocult" Kit	Smith Kline Instruments	52
"Car Fountain"	Condensate, Inc.	53
Snow-Maker for Christmas Trees	Bradford Novelty Co.	53
Electrical Contactor Designs	HB Electrical Manufacturing Co.	54
Electrostatic Precipitators	Ferrex International	54
Weather Stations	Kahlsico International Corporation	54
Rotary Injection Press	Uni-World Industries	55
Pet Identification Tags	American Pet Products	55
Curing Systems	Josch Industries	55
Telephone Station Carrier	Continental Telephone Electronics	56
Microcomputer System	Wave Mate	56
Mail Sorting Machine	Universal Business Machines, Inc.	56
Scented T-Shirts	Scratch 'N Smell International	57
Disintegrator	L&F Industries	57
Turbo-Dryer	Wyssmont Company, Inc.	58
Implant Needle	Velotron Machine Corporation	58
Underwater Cement	Underwater Epoxy-Crete Systems, Inc.	58
Band Saw Blade	American Saw and Manufacturing Co.	59
Drug Interaction Disc	Excerpta Medica Services	59
Kitchen/Bath Core	Besteel	59
Intravenous Pump	I.V. Stat Corporation	60
Fuel Transfer Unit	K.S. Haskins Distributing	61
Air Pollution Control System	Apsee Inc.	61
Cassette Tape Storage Case	New Product Marketing	61

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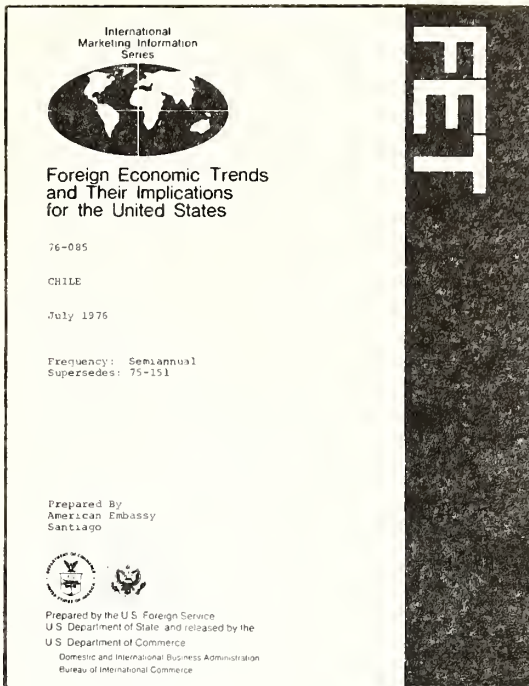
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